



LUMES

Lund University International Master's Programme in Environmental Sciences

“Strengthening” a Mexican Environmental Grassroots Group

Action-Oriented Research for the Asociación Regional Ambiental Sonora-Arizona (A.R.A.S.A.)



Master's Thesis

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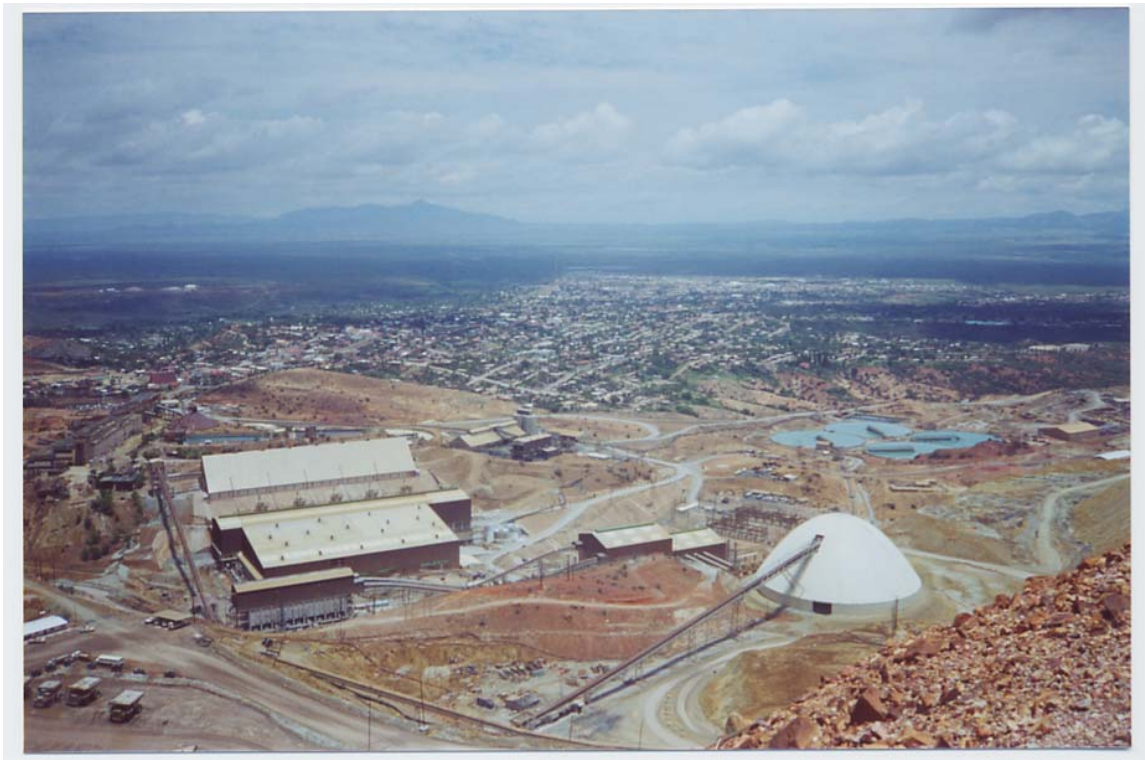
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Para mi estar trabajando en el medioambiente es tan importante como estar viendo a una persona con un infarto. Pues para mi es tan urgente...como una persona muriendo. (For me to be working in the environment is as important as seeing to a person with a heart attack. Well for me it is just as urgent...like a person dying.)

--Interviewee speaking about volunteering for A.R.A.S.A.

ABSTRACT

The purpose of the research is to provide one Mexican environmental grassroots group, the Asociación Regional Ambiental Sonora-Arizona, with a product that can serve as a starting point for self-evaluation and critique. The author employs qualitative methods within the interpretive paradigm of social science research to answer the question: “How can A.R.A.S.A. strengthen itself as an organization?” A.R.A.S.A. participant suggestions for group “strengthening” (and group identity) serve as the primary data sources, and Mexican civil society literature, social psychology, and group psychology are explored for theoretical insight. The most significant conclusion is that A.R.A.S.A. participants offer suggestions for group “strengthening” that strongly match theoretical recommendations, and therefore a compelling avenue for group improvement would be critical reflection on these suggestions and a focused, unified effort to implement them.



Photograph of Cananea, Sonora, Mexico

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GLOSSARY

[Note: Many competing definitions may exist for certain terms (i.e., grassroots organizing, NGO, civil society, governance). The most appropriate definition for the purposes of this research is presented here.]

Action-oriented research—Research that is “specifically aimed at bringing about practical achievements rather than merely aimed at developing understanding” (Kelly, 1999, p. 432).

Analysis—The same as “interpretation” for the purposes of this paper.

A.R.A.S.A.—Asociación Regional Ambiental Sonora-Arizona (Sonora-Arizona Regional Environmental Association).

Civil society—“Civil society is composed of three correlated elements: legal and institutional systems that establish, protect, and actualize citizen rights; the joining of social movements and civic associations that are socially, politically, and ideologically heterogeneous; [and] a political culture anchored in a diversity of public spaces, favorable to tolerance and mutual respect and prone to a critical relationship with the State and the Market” (Olvera, 2001, p. 53).

Distanciation—Attempting to interpret data from a distanced, objective, critical perspective (Kelly, 1999).

Effectiveness—The same as “productivity” for the purposes of this paper.

Efficiency—Productivity per unit time, energy, or money.

Ejididos—Ranching and agricultural cooperatives.

Ejidatarios—Members of ranching and agricultural cooperatives.

Empathetic perspective—Attempting to interpret data from within the context of those experiencing the phenomena (Kelly, 1999).

Governance—“...[A] more encompassing phenomenon than government...[including] regulatory mechanisms in a sphere of activity which function effectively even though they are not endowed with formal authority” (Rosenau, 1992, p. 4-5 cited in Lipschutz, 1996, p. 249).

Grassroots organizing—“[A] form of collective advocacy in behalf of a shared cause or direct action in the service of achieving a collective goal. It is locally mobilized and primarily single-issue-based. Members of grassroots groups are local residents who organize themselves, seek to influence more powerful others, and ‘are not appointed, elected, or recruited except by themselves...’” (Wittig, 1996, p. 4, containing quote from Zander, 1990, p. 22).

Interpretation—All aspects of data processing by the author, from initial empathetic understanding of meanings and contexts to distanciated reflections and recommendations.

Maquiladoras—Internationally owned factories set up in U.S.-Mexican border areas to exploit the comparative advantage of low wages and low environmental standards in Mexico.

Member—A person included on A.R.A.S.A.’s “lista de asistencia” (attendance list) in the government-approved documentation establishing them as an “asociación civil” (civic association) in the state of Sonora, Mexico.

Non-Governmental Organization (NGO)—Private organizations that “pursue public objectives outside of the formal apparatus of the State and that additionally are voluntary, do not pursue profit and depend on donations for the development of labor” (Méndez, 1998, p. 8).

Participant—A person who is actively involved with A.R.A.S.A., but is not on the attendance list and is therefore not an official member. Many participants are currently more active than some members.

Productivity—The achievement of tasks supporting group goals (Source: A.R.A.S.A. interviewees).¹

Reservas—Federally protected nature reserves. Also known as “areas naturales protegidas” (protected natural areas).

Strengthening—Defining and unifying group understanding of A.R.A.S.A.’s vision and strategy; reaching consensus on appropriate goal breadth; achieving actions in the community; and increasing the efficiency and effectiveness of the organization (Source: A.R.A.S.A. interviewees).

Success—Survival, productivity, and group consolidation (Source: A.R.A.S.A. interviewees).

Survival—Continuation of A.R.A.S.A.’s existence as a civic association with regularly active participants.

¹ The literature reviewed reflected the same understanding of productivity for goal-oriented groups (Stroebe et al., 1996; Bettencourt et al., 1996).

I. EXECUTIVE SUMMARY

The purpose of the research is to provide one Mexican environmental grassroots group, the Asociación Regional Ambiental Sonora-Arizona (A.R.A.S.A.—the Sonora-Arizona Regional Environmental Association)², with a product that can serve as a starting point for self-evaluation and critique. The primary research question is: “How can A.R.A.S.A. strengthen itself as an organization?” The author chose to address the principal research question within the interpretive paradigm of social science research using qualitative methods. The interpretive paradigm and qualitative methods were deemed most suitable for answering the primary research question because the subjective understandings of A.R.A.S.A. participants regarding the meaning and implications of the concept, “strengthening A.R.A.S.A.”, were sought to inform the conclusions.

The research method was to interview as many A.R.A.S.A. participants as possible and inquire about their personal suggestions for “strengthening” the group, as well as to solicit their perspectives on aspects related to A.R.A.S.A.’s identity and cultural/social context. Through analysis of the similarities, differences, and linkages between interviewee responses, as well as through comparison with theoretical recommendations, the author sought to form a picture of how the group could become stronger.

The most appropriate theory for the investigation would provide generalizations and suggestions for the “strengthening” of groups similar to A.R.A.S.A. No theoretical sources were found that used the term “strengthening” in recommendations for groups (instead using terms like “survival”, “maintenance”, “productivity”, “effectiveness”, etc.). To be sure that the theoretical sources employed were compatible with A.R.A.S.A. interviewees’ understanding of “strengthening” or “success”, the author looked to concepts offered in response to her questions about these terms. The theoretical sources with recommendations matching interviewee concepts of “strengthening” and “success” came from Mexican civil society literature and the disciplines of social psychology and group psychology/group dynamics.

The most significant conclusion is that A.R.A.S.A. participants offer suggestions for group “strengthening” that strongly match theoretical recommendations, and therefore a compelling avenue for group improvement would be critical reflection on these suggestions and a focused, unified effort to implement them.

II. INTRODUCTION

Research problem, research objective, and primary research question

The author wished to concentrate her research on a practical problem that was relevant to the group she worked with in the summer of 2002, the Asociación Regional Ambiental Sonora-Arizona (A.R.A.S.A.—Sonora-Arizona Regional Environmental Association). The research is therefore “action-oriented” because it is “specifically aimed at bringing about practical achievements rather than merely aimed at developing understanding” (Kelly, 1999, p. 432). The author asked the President of A.R.A.S.A. to suggest a particularly useful research question, and the President said that the group was currently struggling in certain areas and

² All Spanish to English translations are the author’s, including direct quotations from literature and from interviews.

that it would help to get an outsider's perspective on how it could "strengthen itself" (fortalecerse). The problem then, is that the group is struggling, and the research objective is to help identify ways in which the group can strengthen itself. The primary research question is: "How can A.R.A.S.A. strengthen itself as an organization?"

Phenomena to be analyzed and research sub-questions

As the author was generally unfamiliar with A.R.A.S.A. and grassroots organizing, the research method was to interview as many A.R.A.S.A. participants as possible and inquire about their personal suggestions for "strengthening" the group, as well as to solicit their perspectives on A.R.A.S.A.'s identity and cultural/social context. Through analysis of the similarities, differences, and linkages between interviewee responses, as well as through comparison with theoretical recommendations, it was hoped that the author could form a picture of how the group could become stronger. The phenomena to be analyzed are therefore the needs and identity of A.R.A.S.A., as perceived by its participants.

Sub-questions that arose from the primary research question included:

1. To what degree do A.R.A.S.A. participants differ in their perceptions of:
 - a. Methods for strengthening the organization
 - b. Group identity
2. What methods do theories recommend for strengthening similar organizations?
3. Are there recommendations/conclusions to offer A.R.A.S.A. based on analysis of the answers to sub-questions 1 and 2?

Structure of the paper

Chapter III. Background presents a contextual framework for the research, including salient aspects of A.R.A.S.A.'s history, purpose, geography, and structure, as well as its relation to sustainable development from the global to the local scale.

Chapter IV. Theoretical Framework describes selection of the theory, as well as the general role of theory in this research.

Chapter V. Methodology describes all aspects of the research process, from the initial research question and its development, to completion of interviewing and data gathering in the region Sonora-Arizona. Limitations to the methodology and validity are also presented.

Chapter VI. Results describes how the author processed and grouped raw data taken from interviews, and then presents summarized and categorized responses relating to all interview questions.

Chapter VII. Understanding, Application and Discussion focuses on respondents' concrete suggestions of how the group could strengthen itself. Although several questions were posed to interviewees, this was the most important one. Ideas pertaining to other identity/context questions are used to support the analysis, but they are not investigated independently. This chapter is divided into subsections corresponding to the four categories of suggestions. These are: vision and strategy; goal breadth; actions; and efficiency and effectiveness. Each subsection presents first, the author's understanding of interview data, second, her application of the theory, and finally, the discussion.

Chapter VIII. Conclusions summarizes conclusions for the research, as well as suggestions for future study.

Chapter IX. Bibliography lists secondary sources for the research. All primary sources are participants of A.R.A.S.A. who are not identified by name. Basic statistics on interviewees (number, nationality, gender, etc.) are included in Chapter V. Methodology.

Questions beyond the scope

Several fields of inquiry are pertinent to A.R.A.S.A.'s context, but these are not explored due to time and space limitations. These include: a broader discussion of A.R.A.S.A.'s place within Mexican civil society, the general context of civil society groups in Mexico and their relationship to the State and to the greater global arena (i.e. global "governance"), classification schemes for NGO characteristics and purpose as they relate to A.R.A.S.A.'s identity, and the possibilities and limitations to A.R.A.S.A.'s role in transboundary environmental cooperation (e.g., cross-border dialogue on water and climate was just beginning as the author left the region). Additionally, this research does not attempt to investigate and propose general conclusions about environmental grassroots groups in Mexico—it relates specifically to A.R.A.S.A. In spite of this fact, another investigator could potentially use the research as a case study to compare with experiences of similar groups and formulate generalizations. The research does not critique theory, but instead utilizes theory to augment and critique ideas from interviewees.

III. BACKGROUND

What is the Asociación Regional Ambiental Sonora-Arizona?

History and purpose of the organization

Several persons concerned about the effects of mining and industrial operations in the area around Cananea, Sonora, Mexico, began organizing themselves in the spring of 2001. The organization that resulted, A.R.A.S.A., gained legal accreditation as an "asociación civil" (civic association) in the state of Sonora, Mexico in February 2002. The group considers itself to be "a nongovernmental organization convened for the improvement and conservation of the regional ecosystem through education, investment and scientific research" (Varady and Browning-Aiken, 2001, p. 6).

A.R.A.S.A. outlined its "objeto social" (social objective, or "mission statement") as well as its "principios y actividades de trabajo" (principles and work activities) in the government-approved document that gave it legal status as a civic association (A.R.A.S.A., 2002a). The author was told by many interviewees and by the Secretary of A.R.A.S.A. that the list of "principles and work activities" were the group's official, documented goals. Tables 1 and 2 outline A.R.A.S.A.'s mission statement and goals, respectively.

Table 1. A.R.A.S.A.'s documented mission

- a.) To complete actions that benefit the environment and a better quality of life, through projects and actions oriented towards protection, preservation, betterment, education, and research in the ecosystems and populations of the northeast region of Sonora and southern Arizona, comprising the mountain ranges Elenita, Mariquita, Huachuca, and San José, the Ajos Bavispe reserve, and the rivers San Pedro, Sonora, Cocóspera-Magdalena and part of the Santacruz;
- b.) To promote reciprocal assistance between its members regarding conservation of the environment;
- c.) To accomplish the necessary steps against the competent authorities to obtain considerations or advantages concerning conservation of the environment;
- d.) In general, to complete all those acts, arrangements, or activities that in some way are similar or accessories to the aims indicated for completion of its social objective;
- e.) Moreover, the activities of the Association will remain in agreement with the following principles and work activities: (See Table 2, "A.R.A.S.A.'s documented goals").

Source: A.R.A.S.A., 2002a

Table 2. A.R.A.S.A.'s documented goals

1. Principles: respect, tolerance, honor and professional work
2. Study of water recharge and depletion in: watersheds of Sonora, San Pedro, Magdalena, and Santa Cruz rivers
3. Contamination of the San Pedro, Sonoran, and Magdalena rivers
4. Contamination to watersheds
5. Permanent monitoring of drinking water and its sources
6. Monitoring of industrial dust
7. Contamination by carbon monoxide
8. Detection of eroded areas
9. Detection of overgrazing
10. Natural protected areas (Ajos-Bavispe; Project La Mariquita; La Elenita; San José and San Pedro rivers)
11. Hunting ranches
12. Eco-tourism
13. Recreational hunting
14. Forest Fires
15. Temporary regional hunting seasons
16. Environmental education: a.) in schools, b.) citizen awareness
17. Reforestation
18. Policy (Federal, state, and municipal)
19. Landfill for Cananea
20. Sewage treatment for Cananea
21. Mining effects on the environment (industrial runoff, deforestation, and industrial dust)
22. Industrial diversification

Source: A.R.A.S.A., 2002a

A.R.A.S.A.'s geographic context

Cananea, Sonora is located in the northeastern part of the state of Sonora and lies approximately 100 km from the Mexico-U.S. border (See Figure 1). Its population is around 35,000, and the level of education is high relative to other areas in Mexico. The city's primary employer is a copper mine, owned by a Mexican company, Grupo México: Mexicana de Cananea. Copper mining has a long history in Cananea, dating back to 1899 when U.S. entrepreneur William Greene established the "Cananea Consolidated Copper Company" (CCCC) (Flores Molina, 1998); many claim that the Mexican Revolution began in Cananea

with a 1906 strike against Greene's operation. Greene owned a vast area of land in Sonora, and was interested at one time in annexing these properties to the United States (Varady and Browning-Aiken, 2001). His property passed into Mexican hands as late as 1959, when it was divided into seven ejidos (ranching and agricultural cooperatives; Flores Molina, 1998). The memory of the presence of this powerful U.S. owner of Mexican land keeps the fear of U.S. colonialism high in the minds of many community members (a major obstacle for A.R.A.S.A.—See Chapter VI. Results, Table 6).

The greater regional interests of A.R.A.S.A. include four watersheds and a “collar” of mountain ranges that surround them (See Table 1). The portion of this region situated in Mexico lies in an ecotone between the Sonoran and Chihuahuan deserts, supporting four different biotic communities with at least 260 species of vertebrates, sixty four of which are scarce or endangered (SANPES, 1994; Arias Rojo et al., 1999). The high altitude and temperate climate at the tops of the mountains (~ 2,500 m) allow for an ecosystem gradation from pine forests above to semi-desert pastures below (SANPES, 1994). Additionally, the San Pedro watershed, which extends north into southern Arizona, is internationally recognized for its importance to transcontinental bird migration and its extremely high level of ecological diversity. The San Pedro riparian area is utilized by over 350 species of bird, and 18,200 hectares are designated in the United States as a National Conservation Area (Varady and Browning-Aiken, 2001). Mexican and U.S. environmental groups (including A.R.A.S.A.) have been pushing to establish a similar federally protected nature reserve (reserva) on Mexico's side of the San Pedro in order to support a transboundary biological corridor. Resistance by Mexican ejido members (ejidatarios) and mining companies, however, has caused delay and potential cancellation of the project.

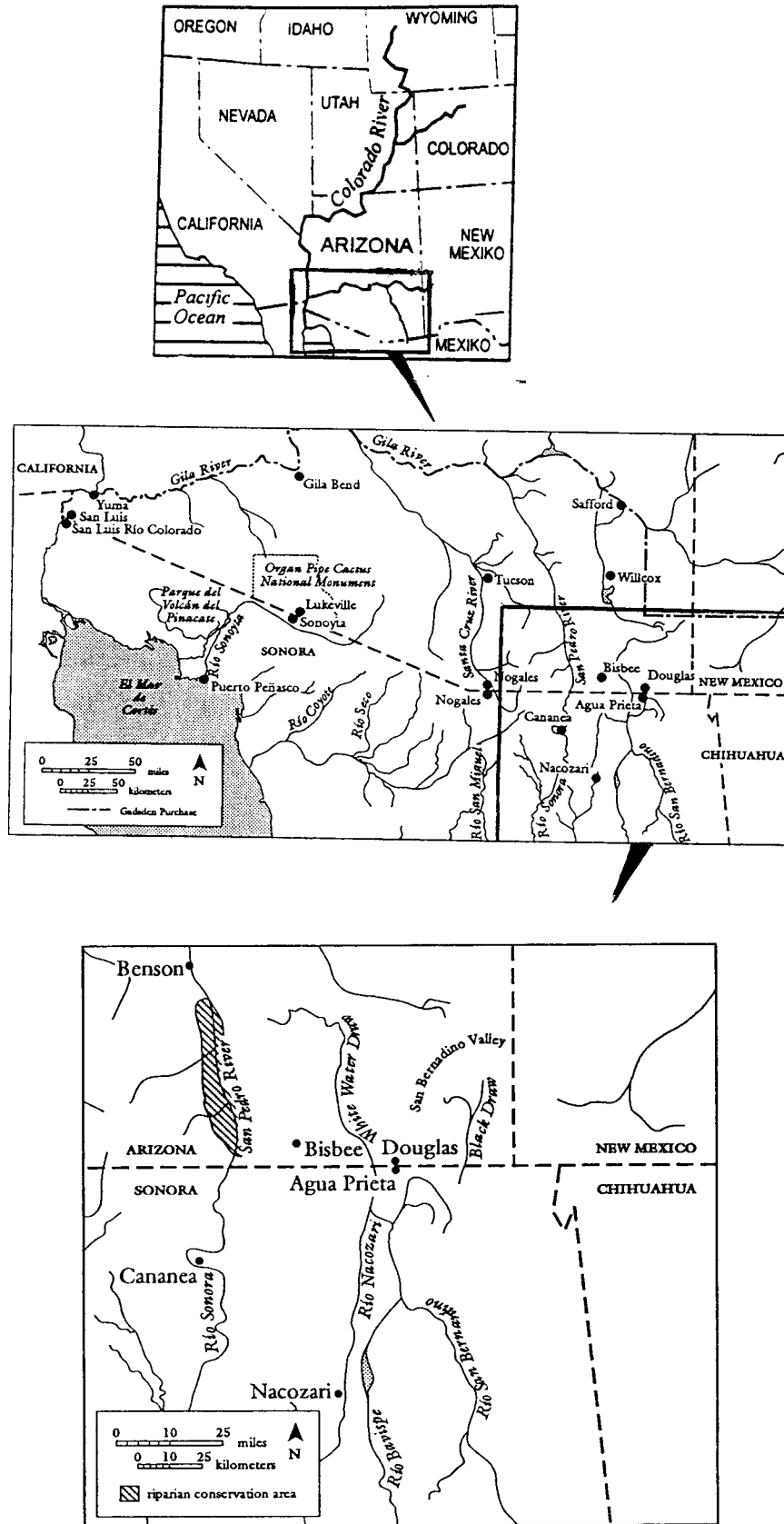


Figure 1. Cananea, Sonora, Mexico and the surrounding area
(Sources: Casselmann, 1998; Varady et al., 1995)

Regional environmental issues

As evidenced by A.R.A.S.A.'s twenty-two goals (See Table 2), regional environmental problems are plentiful. For Cananea, these include: contamination of surface and ground waters with heavy metals, sulfuric acid and other reactive chemicals; atmospheric sulfur dioxide emissions; industrial dust laden with copper, silver, and iron; deforestation; erosion of surface soil; and depletion of groundwater reserves (Flores Molina, 1998). Cananea additionally lacks adequate potable water infrastructure, a wastewater treatment plant, and a landfill. Raw municipal sewage and run-off from the copper mine, a turquoise mine in a neighboring town, and several nearby maquiladoras (internationally owned factories) flow directly into the city's surface and groundwater systems. Garbage is piled into the city's dump, where it is either burned (causing further air pollution) or left standing accessible to wild and domestic animals. The incidence of cancer and spontaneous abortions in the municipality of Cananea are well above what would be expected based on national rates and comparative studies (Flores Molina, 1998).

Additional environmental issues not restricted to Cananea include: overgrazing by ranching interests and subsequent erosion, water extraction and overuse, biodiversity loss, excessive hunting, forest fires, social ignorance or apathy relative to the environment, and the need for industrial diversification beyond economic dependence on copper mining and ranching.

Finally, the Mexico-U.S. border is plagued by trafficking in narcotics and human beings, which often is associated with violence and corruption. Although this last issue is not mentioned in A.R.A.S.A.'s goals, it does affect organizational function to some degree (i.e., illegal use of land keeps resistance to nature reserves high—See Chapter VI. Results, Table 6).

Members, structure, funding

The documentation establishing A.R.A.S.A. as a civic association in the state of Sonora, Mexico was developed by the 27 individuals present at a "constitutional assembly" on January 10, 2002. The 27 people on the document's "lista de asistencia" (attendance list) were all immediately considered official "members" of A.R.A.S.A. These members include: 21 Mexican and 6 U.S. citizens; doctors, lawyers, veterinarians, teachers, mining engineers, students, a historian, members of other environmental NGOs, members of academic institutions, government agency representatives, and ejidatarios.

It is significant that at least four of these official "members" are no longer active in A.R.A.S.A., and that many other individuals have become involved with the organization but are not considered official "members." Only official members enjoy voting rights, though anyone is allowed to attend meetings and participate. Rules of membership are not well understood by most participants. Based on informal interviews, the author became aware that several A.R.A.S.A. participants thought they were official members and were not, and conversely, that several members were under the impression that they were not officially members of the group, when in fact they were. For this reason, the author does not distinguish between interviewees who are A.R.A.S.A. members and those who are only participants, using the term: "participant" in her analysis. However, the term "member" is often used by the interviewees in their responses to interview questions.

A.R.A.S.A. has a nine-person strong “*mesa directiva*” (steering committee) that administers and coordinates, with the group’s president, secretary, and treasurer being the positions of highest responsibility. Decision-making is based on democratic vote of all official members. A.R.A.S.A. currently has a budget of approximately \$16, 500 annually, with funders including Foundation Mascareñas (73%), Mexico Foundation for Conservation (18%), private donations (6%) and contributions from A.R.A.S.A. participants (3%) (A.R.A.S.A., 2002b).

A.R.A.S.A. and sustainability

Sustainable development can be defined as development that “meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987, p. 7). Three principal, inter-related spheres exist within this concept: the economic, biological, and social aspects of development. The economic sphere of sustainability concentrates on income generation without depletion of the capital from which the income is derived; the biological sphere relates to maintenance of the biological system’s capacity to adapt dynamically to change and environmental stress; and the social sphere is based on the notion that cultural diversity and locally-based knowledge are valuable and should be preserved and accessed when making development decisions. Public participation in policy decisions and grassroots mobilization are both elements of socially sustainable development (Munasinghe, 1995).

A.R.A.S.A. fits into this general picture of sustainability in two principal ways. First, its purpose and goals as an organization touch on all three elements of sustainability as described above. Second, its identity as a grassroots environmental NGO places it within the realm of “civil society,” associated with the mobilization to challenge the inadequacies of the State in favor of governance that is more heavily based on civilian participation (i.e., a “bottom-up” approach) (Olvera, 2001; Torres, 1998). A.R.A.S.A.’s promotion of civic participation in environmental problem solving can therefore be seen as an example of socially sustainable practice.

IV. THEORETICAL FRAMEWORK

Contextual basis of the theoretical framework

An interpretive paradigm and qualitative methods were selected for addressing the research question (See Chapter V. Methodology, for justification of this selection). A central purpose of qualitative methodologies is to attempt to understand human phenomena in the context of the phenomena (Terre Blanche and Kelly, 1999). Some research efforts utilize deductive reasoning to investigate the context of a given situation, therefore giving more weight to the “disclosive power of theory” in their analyses (Kelly, 1999, p. 405). Such interpretations can be labeled “experience-distant” because they use externally derived tools to provide insight into contextual factors that might not be known to those immersed in the context. Results from such studies are often used to derive inferences about phenomena that apply across different times and situations (Kelly, 1999).

Conversely, the “phenomenological perspective” understands context primarily through interpretations of experiences occurring within the context itself (i.e., it is “experience-near”). The phenomenological perspective is more directly applicable to the particular phenomena under investigation, but is less generalizable across time and situation (Terre Blanche and

Kelly, 1999; Kelly, 1999). A phenomenological, or “experience near” approach is most suitable for action-oriented research like the present study (Kelly, 1999).

For this reason, theory is utilized to critique and add to the experiential, local knowledge gathered from A.R.A.S.A. participants. Analysis and conclusions are based primarily on the experiential data and similarities/inconsistencies within that data, using theory for only limited additional recommendations.

Motivation for the theory employed

Theory was investigated, evaluated, and either used or discarded throughout the narrowing of the research question and the research process (See Chapter V. Methodology, for a complete discussion of the research process). The initial literature review produced theory related to cooperation mechanisms in transboundary water contexts and international water law. As the research question was modified to fit the context of A.R.A.S.A., the author explored many theoretical disciplines to determine which would be of greatest relevance to the problem of strengthening the organization. The theoretical disciplines investigated include: social psychology as it relates to grassroots organizing; community psychology as it relates to community and individual empowerment; actor-network theory; organization theory; Mexican civil society literature relating to organizational characteristics of civic associations; Mexican civil society literature relating to State-Society dynamics; and group psychology/group dynamics.

The most appropriate theory for evaluating data informing the final research question would provide generalizations and suggestions for the “strengthening” of groups based on empirical studies of organizations similar to A.R.A.S.A. in context, form, and purpose. No theoretical sources were found that used the term “strengthening” in recommendations for groups (instead using terms like “survival”, “maintenance”, “productivity”, “effectiveness”, etc.). To be sure that the theoretical sources employed were compatible with A.R.A.S.A. interviewees’ understanding of “strengthening” or “success”, the author looked to concepts offered in response to her questions about these terms. The concepts included: vision and strategy clarification, goal definition, actions taken, efficiency, effectiveness/productivity, survival, and group consolidation (See Chapter VI. Results for a categorized presentation of interviewee responses).

Although several theoretical sources were identified that offered suggestions on increasing group survival, effectiveness/productivity, and assisting with goal definition, none were based on empirical studies of groups that matched A.R.A.S.A. in context, form, and purpose. The closest matches were found in Mexican civil society literature, social psychology as it relates to grassroots organizing, and the psychology of small groups/group dynamics. These three disciplines offered recommendations based on studies of Mexican urban grassroots organizations, U.S. grassroots organizations, and small groups (less than 20 members).

Other theoretical disciplines investigated were found to be generally incompatible with the research question. Initial analysis of interviewee responses to questions concerning A.R.A.S.A.’s major obstacles, membership, and political role (See Chapter V. Methodology for a complete list of questions) indicated that external factors like A.R.A.S.A.’s relation to the State and to the community were beyond the theoretical and practical scope of the research. This is because interviewee answers to such questions were so disparate and conflicting that group identity in these respects was unclear. A.R.A.S.A. would need a definite

political identity and a clear stance on membership and community representation in order for related theories to prove useful for strengthening them in these respects (i.e., Mexican civil society literature relating to State-Society dynamics and community psychology, respectively). The actor-network theory investigated did not seem to relate directly to the research question, and the organization theory explored seemed primarily focused on a corporate context.

The theoretical disciplines most relevant to the research question (Mexican civil society literature as it relates to organizational characteristics, social psychology as it relates to grassroots organizing, and the psychology of small groups) were not selected and other disciplines were not discarded until all interviewee results had been gathered and had gone through initial analysis. This is because prior to analysis it was generally unclear which sources would provide the most relevant insight relating to interviewee responses. Due to this delay in theoretical selection and the relatively expansive theoretical search, the disciplines chosen were not extensively investigated as to their histories and theoretical contexts, a potential limitation. The use of several theoretical disciplines finds its strength, however, in offering a more comprehensive framework from which to analyze the data.

Relation to previous research in the domain

Mexican civil society literature

Theoretical and empirical work relating to Mexican civil society is sparse (Olvera, 2002), although recently both Mexican and non-Mexican authors have contributed significantly to the field (Canto, 1998). Most of the literature found concentrates on the role of civil society as it interfaces with the Mexican State, as opposed to more applied perspectives on Mexican grassroots organizing. Three sources were located that offer concrete suggestions for improving Mexican grassroots groups, though only one (Barragán, 1999) envisioned improvement in terms of the “strengthening” or “success” concepts mentioned above.

Barragán (1999) offers generalizations for the initiation, growth, and long-term survival of Mexican grassroots groups based on the experiences of three “urban popular” civic organizations that have survived over several decades in neighborhoods surrounding Mexico City. Insights drawn from the organizing experiences of these urban popular organizations can be useful to A.R.A.S.A. because although the purposes and contexts differ in many respects, they share a fundamentally similar mandate in attempting to bring people together locally to solve problems relating to Mexican urban spaces.

Another Mexican civil society source (Olvera, 2002) gave suggestions for how groups could increase effectiveness while interfacing and cooperating with governments. Because it is not currently A.R.A.S.A.’s clear purpose to become involved in public policy discourse (interviewees gave conflicting responses regarding A.R.A.S.A.’s political role. See Chapter VI. Results, Table 8), this source is only utilized in discussing a potential political identity for the group.

Social psychology and grassroots organizing

Although social psychologists have only recently begun investigating grassroots organizing as a particular form of collective action (See the Glossary for a definition of grassroots organizing), many of their theoretical tools are important for understanding processes in

grassroots groups (Wittig, 1996). For example, mobilization around social problems is generally informed by sociology, while psychology offers insight into factors affecting the individual, interpersonal, intergroup, and cultural levels of grassroots organizing. Some examples of these factors include: levels of self-esteem; perceived efficacy; social identities; attitudes towards the political system; alliances between groups and ideologies; and cultural norms, values, and knowledge (ibid).

Social psychological research in the grassroots context is divided into basic, applied, and training research. Basic research attempts to advance knowledge regarding fundamental processes related to grassroots organizing; applied research attempts to adapt knowledge developed in the basic research stage to specific problems grassroots groups face; and training research seeks to serve as a practical guide for training grassroots organizers (ibid).

The first social psychological source utilized in the theoretical framework is Bettencourt (1996), who summarizes recurring themes important to the initiation and maintenance of grassroots efforts. These themes are drawn from ten social psychological studies representing basic, applied, and training research; and covering aspects of social identity and group processes, community empowerment models, and strategies for mobilizing and sustaining participation (Bettencourt, 1996).

The second social psychological source utilized in the theoretical framework, Bettencourt et al. (1996), relates specifically to intragroup dynamics as they pertain to the maintenance and success of grassroots groups.

A third source deals more specifically with training research for grassroots leaders (Kahn, 1982), providing extensive suggestions for important aspects and characteristics of issue (i.e. goal) definition in groups.

Psychology of small groups/group dynamics

Many definitions exist that describe the essential features of a group (See Shaw, 1981, p.4-8 for an incomplete list). The small group psychology source used in this theoretical framework defines a group as being at least two people, “who are interacting with one another in such a manner that each person influences and is influenced by each other person” (Shaw, 1981, p. 8). Although “small” groups have less than twenty members, and A.R.A.S.A. has between twenty-five and thirty active participants, the conclusions from this discipline could still be helpful because Shaw (1981) downplays the importance of the maximum number. He states that many groups of thirty behave as “small” groups do.

Researchers study groups in many different and sometimes mutually exclusive fashions. Some examples of areas of disagreement (besides disagreement in definition) include: focus on theoretical vs. empirical studies; theoretical paradigm employed; and methodologies employed (Shaw, 1981; Witte, 1996). Please see Shaw (1981) for discussions of variations in theory vs. empirical studies and potential methodological strategies; see Witte (1996) for a discussion of competing theoretical paradigms. The group dynamics source used for the theoretical framework gives suggestions for increasing the effectiveness of problem-solving groups taken from over fifty studies on groups (the definitional, theoretical, and methodological characteristics of the base studies were not provided). Shaw (1981) defines the problem-solving group as one that is formed to address “solution of some difficulty, or a decision about some issue or an appropriate course of action” (p. 391). A.R.A.S.A. can be

considered a “problem-solving group” because its goals involve taking appropriate action to ameliorate environmental problems.

A few additional group psychology sources assist in definition of important terms from the discipline (including, Zander, 1999; Hogg, 1996; and Steiner, 1972 cited in Stroebe, 1996). Definitions are provided where the terms are first used.

V. METHODOLOGY

Development of the research question

Tentative research questions were formulated in May 2002 based on a preliminary literature review. The questions were: “Why are some mechanisms for cooperation between the United States and Mexico regarding water use and management more successful than others and how are levels of ‘success’ determined in such cooperation mechanisms?” These research questions were chosen because the author was acutely interested in the dynamics of cooperation between U.S. and Mexican groups (governmental agencies and/or NGOs) around issues of water use and management in the border region. Lennart Olsson provided initial contacts located at the University of Arizona, and the author traveled to that area to concentrate her research on the border between Arizona, U.S.A. and Sonora, Mexico. Dr. Anne Browning-Aiken and Dr. Robert Varady, both of the Udall Center for Studies in Public Policy (University of Arizona), consulted with and supported the author extensively upon her arrival in Tucson, Arizona. They provided literature, advice, office facilities, further contact names, and access and transportation to meetings of the Mexican environmental grassroots group, A.R.A.S.A.

At the time of the author’s arrival in early July, A.R.A.S.A (with the help of the Udall Center) was in the initial planning stages to begin a “Dialogue on Water and Climate” with a U.S. watershed coalition called the Upper San Pedro Partnerships. Although the author was interested in revising the research question to fit the specific context of this cooperative effort, it became apparent that the binational dialogue was not to begin until the end of the summer. The author pursued other avenues for potential research on transboundary cooperation relating to water, conducting informal interviews with seventeen people affiliated with government agencies, policy organizations, and non-profits both in the U.S. and in Mexico. By the end of July, the author decided that it would not be feasible to concentrate the thesis on specific instances of binational cooperation between U.S. and Mexican groups in the vicinity of Arizona-Sonora, and that the entire research focus would need to be revised.

In addition to conducting informal interviews, the author spent the month of July familiarizing herself with the natural history, cultural context, and binational realities of the Arizona-Sonora border region through an initial literature review and several trips to Cananea, Mexico to attend formal and informal A.R.A.S.A meetings. The author was impressed and intrigued by the passion demonstrated by Mexican and U.S. A.R.A.S.A participants for improving the environmental health of the region and increasing Mexico-U.S. dialogue and cooperation. The author decided to concentrate her research on A.R.A.S.A itself, and ideally provide the group with a document that could be useful to them and attentive to their specific needs. Many people and organizations in communities along the Arizona-Sonora border have expressed frustration at past researchers entering communities (and organizations) and asking questions that do not take into account concerns most relevant to them. Researchers have arrived, gathered information, and left without providing the people who helped them in their research

with anything in return (SALSA, 1999). The author did not wish to conduct research in this fashion, and therefore asked the President of A.R.A.S.A about a relevant research question that she could address in the given time frame. The President suggested that the author offer A.R.A.S.A recommendations/conclusions from the author's outside perspective as to how the group could strengthen itself. Therefore, the primary purpose of the research is to offer these recommendations/conclusions, and the primary research question is: "How can A.R.A.S.A strengthen itself as an organization?"

One form of research, known as "participatory action research", encourages researchers to involve participants even further in the research process than just question formulation (i.e., research design, data analysis, and conclusions—Bhana, 1999). The author did not pursue these methods because of time constraints. The research can be labeled as being primarily "applied" because the ultimate goal is to contribute to the understanding and solution of a practical problem, and not to critique or test social theory (the latter is labeled "basic" research within the social sciences—Durrheim, 1999).

Motivation of the methodology

"Researchers working in [the interpretive] tradition assume that people's subjective experiences are real and should be taken seriously (ontology), and that we can understand others' experiences by interacting with them and listening to what they tell us (epistemology), and that qualitative research techniques are best suited to this task (methodology)" (Terre Blanche and Kelly, 1999, p. 123).

The author chose to address the principal research question within the interpretive paradigm of social science research using qualitative methods. This is because the subjective interpretations and perceptions of A.R.A.S.A. participants regarding the meaning and implications of the concept, "strengthening A.R.A.S.A.", were sought to inform the conclusions. Further, the author wished to pursue naturalistic inquiry and develop an empathetic relationship with the people involved in the research, becoming as contextually immersed as possible. A positivist approach would be an objective but detached epistemology, and would not take advantage of the rich, personal, and unique understandings available to the author through deeper contact with group participants (See Durrheim, 1999 for more information on the interpretive and positivist paradigms).

Methods for studying groups exist on a continuum from highly controlled experiments in a laboratory to loosely controlled descriptive-exploratory studies conducted in "natural situations" (i.e., where groups exist independent of the researcher and are not interfered with by the researcher) (Shaw, 1981, p. 14). This research effort is meant to be consistent with the "descriptive-exploratory" type of study, which "examines a natural situation for the purpose of describing it and exploring possible relationships among naturally occurring variables" (Shaw, 1981, p. 15).

The phenomena to be analyzed are the needs and identity of a natural group. The term "natural" specifies that the group formed on its own, without manipulation by the researcher (Shaw, 1981). "Needs and identity" are the specific phenomena to be analyzed within the group context because the research question is: "How can A.R.A.S.A. strengthen itself as an organization?," and therefore the data required pertain to A.R.A.S.A.'s needs for becoming stronger, and A.R.A.S.A.'s identity as perceived by group participants (i.e., who/what is the organization A.R.A.S.A.?). To analyze the needs and identity of the group, data were drawn

from smaller units that form the group, namely individual people and their perceptions of the needs and identity of the whole group. In this way, the units of analysis are individual perceptions of the needs and identity of the whole group. Conclusions will be drawn that relate to the whole group, based on these individual perceptions of the whole group. The data required from the units of analysis (i.e., A.R.A.S.A. participants) are their attitudes, perspectives, critiques, and suggestions for the group, or their “orientations” (See Durrheim, 1999 for a discussion of units of analysis and orientations).

Loosely structured, in-depth interviews were used to collect the primary data for the study instead of other qualitative techniques such as participant observation of meetings or focus groups. This is because personal understandings about A.R.A.S.A. were sought, as removed from the group setting. A survey would have provided data about individuals, showing trends, but it would have lacked the contextual richness of personal interviews. The author would not have been able to clarify meanings in a survey, nor detect non-verbal detail such as tone of voice, facial expression, body movement or other manifestations of meaning. Although the author did observe four A.R.A.S.A. meetings (“participant observation”), these observations were only intended to assist in contextual immersion, relationship building, and accurate understanding of interviewee meanings (i.e., by listening to individual perspectives as voiced in the group and comparing them to interview responses).

Methodological strategy

The author employed a research strategy of nine steps in formulating the recommendations and conclusions for strengthening A.R.A.S.A.: 1.) identify sub-questions that will help define the primary research question, 2.) modify the sub-questions into interview questions, 3.) seek out and contact people to interview, 4.) conduct interviews and evaluate the progress of interviews, potentially modifying interview questions and techniques as the author’s experience and contextual knowledge increases, 5.) categorize primary data (i.e., interview material) through identification of themes, 6.) select the most relevant theory to evaluate the data collected, 7.) analyze data with theory as a lens, 8.) make recommendations for strengthening A.R.A.S.A., based on the data and theory, and 9.) compile and write the research report.

Several aspects of the methodology were pursued throughout the research process and therefore do not fall into the sequential order above. These include: evaluation of potential theories that could be useful for analyzing the data; and collection of notes and observations about A.R.A.S.A.’s identity and contextual reality through investigation of documents, informal interviews, personal relationships, and attendance of A.R.A.S.A. meetings. Those formally and informally interviewed represented Mexican government agencies³, Mexican non-profit organizations⁴, Mexican academic institutions⁵, Mexican industry⁶, Mexican

³ Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT—Secretary of the Environment and Natural Resources); Instituto del Medio Ambiente y el Desarrollo Sustentable (IMADES—Institute of the Environment and Sustainable Development).

⁴ Enlace Ecológico (Ecological Link); C.A.S.A Elementos Civiles Organizados (Organised Civil Elements); Scouts de México (Scouts of Mexico); Red Fronteriza de Salud y Ambiente (Border Network of Health and Environment).

⁵ Centro de Bachillerato Tecnológico Industrial y de Servicios (CEBETIS—Center of Education in Technology, Industry, and Services).

⁶ Grupo Mexico Mexicana de Cananea

cooperatives⁷, U.S. government agencies⁸, U.S. non-profit organizations⁹, U.S. academic institutions¹⁰, and U.S. industry¹¹.

Although results from formal interviews and official documentation are the primary data presented in this document, the research process was facilitated by the access, background context, and insight supplied by informal interviews, personal relationships, review of official documentation, and the author's attendance at A.R.A.S.A. meetings. Inferences from these interactions were used as a crosscheck of the author's interpretations of the formal interview data.

Research sub-questions and specific interview questions

Sub-questions that arose from the primary research question included:

1. To what degree do A.R.A.S.A. participants differ in their perceptions of:
 - a. Methods for strengthening the organization
 - b. Group identity
2. What methods do theories recommend for strengthening similar organizations?
3. Are there recommendations/conclusions to offer A.R.A.S.A. based on analysis of the answers to sub-questions 1 and 2?

The author formulated six questions for interviewees. The responses to these questions were intended to answer sub-question 1. The questions are:

1. Cuáles son las metas más importantes de A.R.A.S.A., en su opinión? (What are A.R.A.S.A.'s most important goals, in your opinion?)
2. Cuáles son los obstáculos más grandes que tiene A.R.A.S.A. o que ya ha tenido? (What are the greatest obstacles that A.R.A.S.A. faces or has already faced?)
3. Cuáles son los éxitos más importantes de A.R.A.S.A.? (What are the most important successes of A.R.A.S.A.?)
4. Tiene usted algunos sugerencias concretas para cómo puede A.R.A.S.A. fortalecerse y augmenter us impact en la commanded? (Do you have any concrete suggestions for how A.R.A.S.A. can strengthen itself and increase its impact in the community?)
5. Cómo deben de ser los miembros de A.R.A.S.A.? Debe de ser A.R.A.S.A. representativo de todos intereses en la comunidad? (What should the members of A.R.A.S.A. be like? Should A.R.A.S.A. be representative of all the interests in the community?)
6. Cómo debe de ser la relación entre A.R.A.S.A. y la comunidad? (What should the relationship between A.R.A.S.A. and the community be like?)

Mid-way through the interview process the author realized from an investigation of civil society literature that the political identity of grassroots groups is extremely important for their overall identity, power, and impact within communities (Olvera, 2002; Méndez, 1998;

⁷ Ejido Cananea.

⁸ U.S. National Parks Service; U.S. Bureau of Land Management.

⁹ Friends of the Santa Cruz River; Friends of the San Pedro River; Corredor Colibrí (Hummingbird Corridor); The Nature Conservancy; Upper San Pedro Partnerships.

¹⁰ University of Arizona Udall Center for Studies in Public Policy, Department of Latin American Studies and Water Resources Research Center; Sonoran Institute; University of New Mexico.

¹¹ Phelps-Dodge, Inc.

Canto, 1998). Therefore, an additional question was solicited from the last seven people interviewed:

7. *Cuál debe de ser su papel político? (What should its political role be?)*

Because the author asked for suggestions for strengthening the group and increasing its impact in the community in the same question, responses were potentially biased towards community-related ideas. This limits the research understanding of how interviewees truly understand the meaning of “strengthening” A.R.A.S.A. A potential limitation to the use of the results of question 7 is that commentary was not drawn from the first six interviewees, and was not pursued later due to time constraints.

Another limitation relates to the overlap between questions that often led to interviewees giving answers relating to multiple questions. For example, when asking about the most important goals of the organization, some people answered that they were unsure of the most important goals due to the wide goal breadth. In discussing obstacles, these interviewees said one obstacle was the lack of focus caused by all-encompassing goals. Goal definition and clarification was then also mentioned as a “suggestion for strengthening” A.R.A.S.A. To the extent that this occurred across interview questions, the author grouped responses in such a way that all suggestions for improving A.R.A.S.A. or critiques of A.R.A.S.A. were included in Table 4, “Interviewee suggestions for strengthening A.R.A.S.A. and increasing its impact in the community,” because these suggestions and critiques are the most important data for addressing the research question, and form the backbone of analysis for the study (See Chapter VI. Results, for further discussion on analysis and grouping of raw interview data).

The interview process

It was the author’s intent to interview as many active A.R.A.S.A. participants as possible in the time allotted. Two months were available for conducting formal interviews, August and September 2002. The author traveled to Cananea, Sonora approximately every two weeks to conduct interviews. Three to four interviews were feasible per trip because of interviewee availability and the expense of traveling to and staying in Mexico. The author selected the first six interviewees based on personal relationships built while attending A.R.A.S.A. meetings and visiting Cananea in the month of July (“opportunistic sampling”—Kelly, 1999, p. 380). The author selected the next seven interviewees with the goal of balancing numbers of men and women, Mexicans and US citizens, and members of the steering committee vs. regular members vs. non-member participants. The intent was to incorporate as many diverse viewpoints as possible (“maximum variation sampling”—Kelly, 1999, p. 382). All interviewees were selected because the author had either personally seen them at several A.R.A.S.A. functions or because they were said to be particularly active within the organization. Because of time and dollar constraints, the author was unable to arrive at a state of “sampling to redundancy” which may have provided increased sample power (Kelly, 1999, p. 381).

The sample included five members on the steering committee, five members, and three non-member participants. Two of the non-members were not aware of how membership worked; one considered himself a member and the other wanted to become a member. Two women and eleven men, two U.S. citizens and eleven Mexican citizens were formally interviewed.

Interviews were loosely structured and relatively informal. The author wished to have interviewees give opinions about specific points (as articulated in the six or seven questions). The loosely structured format allowed interviewees to respond freely, not merely giving “yes” and “no” answers that could have been obtained with a survey. The author sought to conduct interviews in settings that would put the respondent at ease (Terre Blanche and Kelly, 1999). A few people more familiar with the context and community advised that the sharing of meals was particularly appropriate for building relationships and establishing relaxed rapport in Mexican culture, and that the meal would also be a good opportunity to provide interviewees with something tangible in return for their time and interest.¹² The four interviews conducted over meals were generally longer and more relaxed. They more closely resembled informal conversations than the other interviews. Unfortunately, the realities of busy schedules and other time constraints limited the interviewing over meals. Three interviews were held in individual homes, and two interviews were conducted in offices. Two interviews were performed during long auto trips, one was performed directly after an A.R.A.S.A. meeting at the group’s meeting place, and one interview took place by speaker-telephone. All interviews were tape recorded with the respondent’s consent.

Several limitations to the interview process were noted. Less-than-optimal interview times and venues may have resulted in interviewee fatigue or distraction on several occasions. “Demand characteristics” describe the condition where the interview setting can bias responses to questions in a particular direction (Terre Blanche and Kelly, 1999, p. 48). Instances where demand characteristics may have biased results are the five interviews that took place with other, A.R.A.S.A.-related people within earshot even though the interviewees did not seem distracted; the author did not request that the interview be moved because the setting was comfortable, convenient, and around trusted friends. For interviews conducted in the auto or by speaker-telephone, exclusion of others was not feasible. The author’s inexperience could have been an additional limitation by influencing responses via the “experimenter effect” (Terre Blanche and Durrheim, 1999). Although the author was aware of and attempted to avoid the experimenter effect, in some cases respondents asked for clarifications regarding the purpose of a question, and the author gave examples of plausible directions for response (particularly in initial interviews).

General limitations to the methodology

The most apparent general limitation to the research effort is the language (Spanish) in which most formal interviews, a large number of informal interviews, and all A.R.A.S.A. meetings were conducted. The author is fluent in Spanish, but Spanish is not her first language. The local Spanish dialect differs from dialects in Spain to which the author had previous exposure. Nonetheless, she felt comfortable with comprehension in all situations. Interviewees also were satisfied with the author’s comprehension, and almost always confirmed her recapitulation and understanding of their meanings. Interpretation of subtleties within responses and interpretation of connections among the responses of different interviewees may have been limited. Bias could result from cultural and linguistic differences, as well as from factors that form the author’s identity and experiential background. “Hermeneutics”, or the “practice of interpretation in all its forms,” can be affected by the degree to which the researcher attempts to interpret data either from within the context of those experiencing the phenomena (“empathetic perspective”), or from a more distanced, objective, and critical perspective (“distanciation”) (Kelly, 1999, p. 398-400). Achieving an appropriate balance between

¹² The author meant this as a gesture of gratitude, and not a form of payment.

empathy and distance is a challenge for qualitative researchers, because the most insightful accounts contain both empathetic and distanced elements (Kelly, 1999). The author attempted to develop an empathetic perspective on meanings by becoming involved with A.R.A.S.A. participants and their families whenever she came into Cananea. She socialized with people beyond interview appointments (the objective was not only to improve interpretation, but also to develop genuine relationships and friendships). The author attempted to achieve the appropriate level of distancing through critical comparison of inconsistencies in different interviewee responses, inconsistencies in interviewee responses and actual conditions or actions, and theoretical investigation.

The final limitation to methodology is that the author's identity as an unknown U.S. citizen/student with non-formal connections to a U.S. academic institution (the author was brought into the group through connections with the Udall Center for Studies in Public Policy, University of Arizona) may have influenced A.R.A.S.A. participants' perception of her purpose (i.e., was the research really intended to help A.R.A.S.A. or was it somehow biased to further other agendas?). Association of the researcher with the "vested interests of the gatekeeper," or the person that brought her into the situation is common in qualitative research (Kelly, 1999). The author attempted to reduce the chances of this by building personal relationships with A.R.A.S.A. participants, by asking A.R.A.S.A.'s President to help in the formulation of the research question, by emphasizing that the purpose of the research was to help the group, and by indicating that she would return to the region in early 2003 to present the findings to A.R.A.S.A.

Research validity

"In its broadest sense, validity refers to the degree to which the research conclusions are sound" (Durrheim and Wassenaar, 1999, p. 61).

There are many different kinds of "validity" in research processes. More traditional, positivist forms of validity are generally rejected by interpretive researchers because the interpretive ontology does not assume that reality is stable and unchanging, but instead that it is subjective and contextually based. Interpretative measurements of validity generally relate to the credibility of research conclusions drawn from the data, or the degree to which the reader is convinced that the findings are true to the context and situation from which they were drawn (Durrheim and Wassenaar, 1999). Researchers can strengthen credibility by providing a detailed description of the research process, by motivating choices made and methods selected, by highlighting "validity threats" (i.e., limitations) and their possible consequences, and by informing the reader about instances when the writing reflects an attempt at empathetic understanding vs. distancing (Durrheim and Wassenaar, 1999; Kelly, 1999). The author has attempted to fulfill these criteria by giving a thorough account of the research process, methodology employed, and limitations to the study. The author has also tried to clarify interpretive stages for the reader, by breaking analysis sections into relatively raw data (Chapter VI. Results), empathetic understanding, theoretical application, and more distanced discussion (Chapter VII. Understanding, Application, and Discussion).

One additional kind of validity, relevant for action-oriented research, is the degree to which the research brings about the action or changes that it attempts to inform ("pragmatic proof"—Kelly, 1999). For the purposes of this study, pragmatic proof would occur if the document were to assist A.R.A.S.A. in becoming stronger as an organization, an unknown at the current time.

VI. RESULTS

Method for initial analysis of raw data

Raw data are in the form of approximately thirteen hours of interview tape recordings and several official A.R.A.S.A. documents. Raw interview data were initially analyzed by gathering and summarizing (into bullet points) the principal ideas given by each interviewee for each question. Interviewee bullet-point ideas were then grouped according to the question asked, and the identities of persons who had voiced particular ideas were subsequently ignored. Unique ideas for each question were given one bullet point, and extremely similar or identical ideas were consolidated into a single bullet point. The bullet point ideas were then grouped according to categories that arose from the data. Categories were thus induced and did not originate from theory because the author wanted to remain “experience-near,” allowing interpretations of interview data to drive use of the theory and not vice versa (See Chapter IV. Theoretical Framework, for a discussion of “experience-near” approaches). The categories were refined and adapted during the process of data interpretation and further analysis, as the author’s understanding of the most relevant linkages and themes changed. As interview questions and interviewee answers tended to blend together during many interviews (See Chapter V. Methodology, research sub-questions and interview questions), the author grouped ideas in such a way that all suggestions for improving A.R.A.S.A. or critiques of A.R.A.S.A. were included in Table 4. These data are the most essential to the research question and are analyzed in the following chapter.

Presentation of results

Results are presented in eight tables. Table 3, “Interviewee perceptions of A.R.A.S.A.’s major successes,” represents interviewee responses to the question, “What are the most important successes of A.R.A.S.A.?” The more frequent responses are listed nearer the top. The purpose of this question was to understand how interviewees perceived “success” in A.R.A.S.A.’s particular context. Interviewee understandings of the meaning of “success” informed selection of the theory for analysis (for example, because many interviewees understood “success” to mean “survival” or “productivity,” theory was selected that gave recommendations for increasing chances of survival and productivity in groups).

Responses to the two questions that inform Table 4, “Suggestions given by interviewees for strengthening A.R.A.S.A. and increasing its impact in the community,” are more complex and represent the bulk of the research and analysis. The questions were, “Do you have any concrete suggestions for how A.R.A.S.A. can strengthen itself and increase its impact in the community?”, and “What should the relationship between A.R.A.S.A. and the community be like?” Answers to these two questions were so intertwined that they were combined and analyzed together. Four categories emerged from the data and are presented in Table 4: vision and strategy, goal breadth, actions, and efficiency and effectiveness. Ideas from each category are investigated in Chapter VII. Understanding, Application, and Discussion. Rich quotations and metaphors used by respondents to elaborate on ideas are also included in Chapter VII.

Responses to identity and context questions are displayed in Tables 5-8:

- Table 5, “Interviewee perceptions of A.R.A.S.A.’s most important goals,” presents responses to the question, “What are A.R.A.S.A.’s most important goals, in your opinion?”

- Table 6, “Interviewee perceptions of A.R.A.S.A.’s most significant obstacles,” gives responses to the question, “What are the greatest obstacles that A.R.A.S.A. faces or has already faced?”
- Table 7, “Interviewee perceptions of A.R.A.S.A.’s membership,” refers to the question, “What should the members of A.R.A.S.A. be like? Should A.R.A.S.A. be representative of all the interests in the community?”
- Table 8, “Interviewee perceptions of A.R.A.S.A.’s political role,” responds to the question, “What should its political role be?”

Responses to these four questions are only occasionally referenced in the analysis of ideas related to Table 4. The data contained in Tables 5-8 are not interpreted separately because their implications are generally beyond the scope of the research question. Rich quotes and metaphors are left intact in these tables.

Table 3. Interviewee perceptions of A.R.A.S.A.’s major successes	
	<ul style="list-style-type: none"> • Group survival • Group consolidation (i.e., having brought together so many people from so many diverse interests and professions) • Productivity • Do not know about successes/ too early to speak of successes

Table 4. Interviewee suggestions for strengthening A.R.A.S.A. and increasing its impact in the community	
Suggestion category	Suggestion summaries
<i>Vision and strategy</i>	<ul style="list-style-type: none"> • There is an urgent need for a clear long-term vision and strategic plan as well as a short-term plan. • Strategic plans must be ordered and specific, with indicators for success and clear points of arrival. • Long-term vision and strategic plan are needed but not urgent because these will come naturally and this process is just now beginning.
<i>Goal breadth</i>	<ul style="list-style-type: none"> • Goals are too broadly defined: not enough resources and capacity to address them all. This increases participant frustration. • Goals and the resource needs to meet those goals should match the available resources. This seems the most common downfall of new organizations. • Goals are not too broadly defined: A.R.A.S.A. is currently pursuing projects in all areas. • Broad goals encourage a broad support base and increases connections. • Organizational properties should be strategically chosen to support the principal goal. These may be mutually exclusive for different goals.
<i>Action</i>	<ul style="list-style-type: none"> • Get “achievable” projects done in the community. Potentially small, but immediately achievable. • Make A.R.A.S.A.’s work visible through campaigns, propaganda, environmental education, etc. • Inspire a culture of caring for the environment through environmental education in general. • A.R.A.S.A. should work with the community and not only with members. • To counter mistrust, utilize more A.R.A.S.A. members in reaching the community. • Accomplishing achievable acts will bring more members. • A clear improvement in the environment of the region Sonora-Arizona as brought about by A.R.A.S.A. through actions will particularly strengthen the group. • Accomplishing achievable acts will serve as proof of A.R.A.S.A.’s good will and

Table 4. Interviewee suggestions for strengthening A.R.A.S.A. and increasing its impact in the community

	<p>will counter slandering and misperceptions in the community.</p> <ul style="list-style-type: none"> • Achievable acts should encourage the community to support A.R.A.S.A. financially. • Achievable acts lay the base for potentially more controversial acts and manifestations later. • Know what the most important problems of the community are and which are most appropriate to get involved in. • Do not get involved with issues that are too difficult, unclear, or that the group is not well prepared for. • Work to convince the community of the relevance of environmental problems identified by the group. • Avoid controversial actions at first. • Gather crucial environmental data and knowledge through monitoring, assessing, research, and networking. A.R.A.S.A. should know more about the state of the environment than industry and the government do. • Use data and knowledge gathered to educate A.R.A.S.A. members and to increase their professional capacity. • Use data and knowledge gathered to pressure government officials to pressure industry to clean up its act. • Use data and knowledge gathered to pressure industry directly to clean up its act. • Do not pressure industry or the government directly: give environmental knowledge to communities to empower them to apply pressure. • The relationship to the community and to other groups is based on confidence and trust, which come from transparency in actions. • Some suggested achievable actions include: doing community clean-up projects, working on environmentally-related art projects and plays in schools, or hiring a group of 10-15 full time employees trained to combat forest fires and guard against illegal hunting. • Perhaps some actions should be particularly visible (but not radical) to get the community's attention regarding A.R.A.S.A., like through using campaigns. • Who is the community? "Community" is a sociological fiction.
<p><i>Efficiency and effectiveness</i></p>	<ul style="list-style-type: none"> • Should be organized like a team—decentralized into smaller working groups of specific expertise or interest. • Should know about the particular interests of all group members (make a list) and keep members informed about future and present activities of A.R.A.S.A. and related groups. This should help increase the capacity and knowledge of members, because they can learn from each other's areas of expertise. • A.R.A.S.A. is not currently taking advantage of members' specific expertise: this is a wasted resource. • Effective group organization and delegation of responsibility is crucial to avoid burnout, increase efficiency, and meaningfully include members. • Keep and distribute a calendar of events and meetings, giving at least 2 to 3 weeks notice. • Have meetings at a consistent time and day of the week each month. • Send out formal invitations to those whose attendance is desired, especially if they are members of government or official organizations. • A facilitator and translator are needed for meetings. • If increased binational cooperation is desired, consider holding some meetings closer to the border (i.e., in Naco, Sonora, Mexico). • Meetings should be shorter, better organized and structured, and people should not be allowed to talk too long or repeat things that have already been said. • Meetings should stick to the stated agenda.

Table 4. Interviewee suggestions for strengthening A.R.A.S.A. and increasing its impact in the community

	<ul style="list-style-type: none"> • Meetings should be conducted so participants come away feeling like something concrete was accomplished or decided. This should increase personal motivation for continuing participation. • Accomplishing achievable acts should also give members a sense of efficacy and personal satisfaction, encouraging them to stay members. • Try to make projects and meetings fun. This will increase both interest and social ties. • Members should focus on a strong work ethic. • To increase efficiency, give working groups limited time to complete projects and report on them. • To increase efficiency, make sure that members adhere to given roles and specialties. • Acquire more funding; ask for member donations as one means of support. • A degree of financial autonomy is crucial to avoid bureaucracy and other peoples' agendas. • More professional connections are needed to increase the capacity of the group. • More physical infrastructure and paid staff are needed: good computers with Internet capacity, a vehicle, a nice A.R.A.S.A. sign for the office, a secretary (office role) and an administrator/project manager (who strategically decides on how money is best spent). • Increase the professional capacity of members through data collection and research (both monitoring data and information on environmental economics, marketing, and politics) and subsequent distribution of findings. Professional capacity can also be augmented through encouraging members to keep up-to-date on environmentally relevant news, attend educational workshops and other A.R.A.S.A. or related groups' events, etc. • Encourage connections with academic and research institutions, people with NGO experience, and those with other professional expertise.
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Table 5. Interviewee perceptions of A.R.A.S.A.'s most important goals

Goal category	Goal summary
<i>Environmental education</i>	<ul style="list-style-type: none"> • Short term goals: education of children, teachers, parents, and the general community in issues of air, water, and land. • Begin with children! Older people have already formed habits and prejudices, and are resistant to change. • Educate regarding environmental laws. • Increase public understanding of the richness of the area. • Longer term: Foster a culture of caring and ownership of the environment. • Longer term: Change habits and customs: "...y que se empieza a dar cuenta de la urgencia que tenemos sobre la cultura ambiental, del importante que tenemos que cambiar nuestros actitudes, nuestros malos costumbres, para poder llegar a una vida mejor. No a sobrevivir, a vivir." (...and that one starts to realize the urgency that we have concerning an environmental culture, of how important it is to change our attitudes, our bad customs, in order to be able to achieve a better life. Not to survive, to <u>live</u>).
<i>Preservation/restoration of the ecological richness of the region</i>	<ul style="list-style-type: none"> • Serve as a facilitator for addressing the needs of the region: A.R.A.S.A. should channel resources to problem areas. • Focus should be holistic and ecosystem-based. • Work to halt or slow the environmental deterioration occurring in the region. • Conserve, preserve, and protect the air, water, and land.

Table 5. Interviewee perceptions of A.R.A.S.A.’s most important goals	
	<ul style="list-style-type: none"> • Restore and rehabilitate the air, water, and land; including reforestation. • Encourage the sustainable management of resources. • Increase the amount of land dedicated to federally protected nature reserves (reservas). • Avoid pursuing the issue of reservas for now at least. • The region of focus includes four watersheds: Magdalena, Santa Cruz, San Pedro, Sonora, and the surrounding “collar” of mountains. • The region of focus includes northern Sonora and southern Arizona: binational scope. • Better to focus on areas closer to Cananea at first, like the Sonoran and San Pedro watersheds- be careful not to overextend A.R.A.S.A.’s capacity.
<i>Group consolidation</i>	<ul style="list-style-type: none"> • Work for group consolidation by reconciling conflicting interests and passions, and reaching agreement on “a donde van” (where they are going). • Work for group consolidation to form a tight “hard core” with a high capacity to get things done. Achieve this through increasing the professional and academic capacity of group members, and satisfying information and research needs. • Break the “culture of inertia” inherent in many small groups by getting A.R.A.S.A. members out on-the-ground, working in the community. This “culture of inertia” is characterized by environmentalists that spend most of their time within their own group, and not much time out working on the real, actual problems of people in the community.
<i>Information gathering and dissemination</i>	<ul style="list-style-type: none"> • Powerful groups can tell A.R.A.S.A. that they are wrong because powerful groups have enough money and resources to do studies that prove their own interests right. A.R.A.S.A. should make sure to do lots of fact-finding and to get enough information to counter these claims. • A.R.A.S.A. should monitor and gather information on the contamination of air, water, soils, etc. and use it to sensitize members of government environmental departments about real problems in the area. Sensitize them to really care about the environment and not just about their political careers.

Table 6. Interviewee perceptions of A.R.A.S.A.’s most significant obstacles	
Obstacle category	Obstacle summary
<i>Conflicting interests</i>	<ul style="list-style-type: none"> • There exists a fear of talking about environmental issues because of the influence of powerful groups that might have conflicting interests. • There is a general obstacle posed by groups that might have conflicting interests (mine, agriculture, ranching, illegal users of land). A.R.A.S.A. must work carefully and sensitively with such groups. • There is a danger of people joining A.R.A.S.A. with the express purpose of bringing dissent and conflict to their ranks—to weaken and destroy them. Images of such entrants laying “trampas” (traps), and coming into A.R.A.S.A. as “caballos de Troya” (Trojan horses). • Need to strategically, carefully deal with political manipulation in a year of so many elections in Mexico (everyone but the President of the Republic is up for re-election in this year).
<i>Economic and legal issues</i>	<ul style="list-style-type: none"> • Economic crisis in the region (northern Sonora) makes people more mistrustful of environmental groups that would restrict economic options for their lands. • Economic crisis exists in Cananea specifically: it is a copper mining town and the international price of copper is currently very low. • Recent changes to the legal ownership and management of ejidos in Mexico

Table 6. Interviewee perceptions of A.R.A.S.A.’s most significant obstacles

	<p>(Revision of Article 27 to the Mexican Constitution) affects the way that people can own land in ejidos, and changes the rules for who can own land in ejidos.</p> <ul style="list-style-type: none"> • These legal and economic changes encourage use of ejido land in manners inconsistent with past agricultural and ranching practices (i.e., promotes illegal use of lands). Illegal use of lands discourages people from interest in holistic and sustainable management of resources, and from outside influence in such management. • These legal and economic changes also discourage ejidatarios that use their land legally from allowing environmental projects on their lands.
<p><i>Community misperception of A.R.A.S.A. and its intent</i></p>	<ul style="list-style-type: none"> • Many community members think that A.R.A.S.A.’s agenda is to work with the government to lock up their lands in federally protected nature reserves. • Some community members may think that A.R.A.S.A. is a poster-group for industry or government, to give them a good image. • The community mistrusts any group working with the government on a project. Therefore A.R.A.S.A.’s work with the government to encourage formation of reserves throws mistrust on the whole group and its intentions. This is because government imposition of anything (like a reserve) is unwelcome, especially in Mexico with its history of authoritarian-style government. • Many community members think that A.R.A.S.A. is working with Northern (U.S.) interests to take Mexican control away from Mexican land: a form of neo-colonialism. Why is the U.S. giving so much money to support expansion of Mexican reserves that would form a biological corridor with U.S. federally protected land? • Some community members may not know exactly what A.R.A.S.A. is about or what their intent is, but they distrust them anyway out of a general fear of change, especially in this time of economic crisis. • Many doors will be shut to A.R.A.S.A. at first, but “tiene que seguir tocando por las puertas” (you have to continue knocking at the doors). • Encouraging the formation and expansion of reserves is so important in an ecological sense, but at the same so problematic because of all of the controversy. • Because expanding Mexico’s reserves would mostly impact ejidatarios, there is an extreme need to include them more in A.R.A.S.A.’s efforts and to help them understand the group’s intent. • Cananea is a small town and thus everyone knows everyone else. Prejudices can be formed based on rumor and based on activities of distant family members even. The group can be negatively affected if community members overwhelmingly associate the group with just a few members and not with a diversity of people in the town.
<p><i>Group dynamics</i></p>	<ul style="list-style-type: none"> • The potential danger for intra-group conflict (particularly around sensitive issues) is particularly high because A.R.A.S.A. is made up of people from so many different backgrounds and with such different passions. Avoid controversial issues at first to keep such conflict to a minimum. Also, reinforce the importance of demonstrating “respect, tolerance, and honor” towards one another, as outlined in A.R.A.S.A.’s documented goals (See Table 2). • As in Cananea in general, A.R.A.S.A.’s members are extremely well educated and headstrong about issues. The city has, “lots of generals but no soldiers” (i.e., everyone wants to give orders or dictate the agenda, and no one wants to follow). This could be a problem for A.R.A.S.A. and could encourage the group to split into several smaller groups with different agendas. • Members have different agendas, be careful of people that only want to join A.R.A.S.A. to take advantage of the group name.

Table 7. Interviewee perceptions of A.R.A.S.A.'s membership

- Clear membership rules and a list of members are needed. Many people did not know if they were members, who were members, or how membership worked.
- A.R.A.S.A. should not be organized or structured in a way that hints at authoritarianism of any kind (i.e., by being un-democratic, exclusive, or rigid). Great mistrust of this in Mexico. As membership increases, everything should be open to dialogue and honest critique- even aspects of the mission statement itself (rationale: if the goal is to serve the community, what does it matter if the group “head” loses some control?). Otherwise mistrust in the community is perpetuated.
- A.R.A.S.A. should feel confident in its stated mission and goals. If you do not agree with them, you do not have to join or you can just attend meetings and voice your opinion (everyone should be allowed at meetings). Otherwise, there is the danger of people entering just to destroy the group.
- Needs more members in general, more diffusion, invite everyone you know that might be interested. A.R.A.S.A. can use the varied skill sets of any and all parties.
- Everyone should be included (U.S. groups too) because we all breathe the same air, drink the same water, and live on the same land.
- “Calidad no cantidad” (Quality not quantity). A.R.A.S.A. does not necessarily need more members in general, it needs members that are firmly dedicated to the cause and that are willing to work.
- Needs a small “core” group at first until it is stronger and more consolidated with knowledge, trust, and strong social ties; otherwise dissenting voices could weaken it.
- To be inclusive but protect against sabotage, maybe use a series of non-voting subgroups (like subgroups representing industry or government interests) around a central core of voting members.
- To be inclusive but protect against sabotage, maybe keep membership open to everyone but only allow the steering committee to vote. The steering committee should decide on membership rules.
- Does not need to be inclusive: there is a difference between a public organization and a private one. Public organizations need to be elected and representative. Private organizations can choose their purpose and mission and stick to it.
- Does not need to be inclusive: a philosopher once said, when making a moral decision, that which is good is strengthens a person, that which is not good weakens him. In the same vein, why do we eat bread and not rocks? Because our bodies can digest bread to make us stronger, while rocks make us sick. So A.R.A.S.A. does not have to include voices that will only weaken the group.

Table 8. Interviewee perceptions of A.R.A.S.A.'s political role

- Do not get involved with political candidates: otherwise, “you are eating with the devil” and you will need “very long forks!”
- Do support good candidates, but do not become too politicized.
- Offer pro-active, positive proposals to congress and municipal governments, not only critiques.
- Get the community’s strong support on proposals to the government.
- Do not offer proposals to the congress and government, because doing so takes a lot of time and, “las leyes a veces son letra muerta que no se aplica” (the laws are sometimes dead words that are not applied).
- Be cautious in allowing membership to government or industry officials. There is a danger of A.R.A.S.A. being co-opted to give them a better environmental image.
- Members of government should be encouraged to come. They have the power to implement change and interpret scientific data.
- Members of government should not be encouraged to come. A.R.A.S.A. will feel constrained in what they can talk about, and will simultaneously question the government official’s intention in being there.

VII. UNDERSTANDING, APPLICATION, AND DISCUSSION

Chapter VII. Understanding, Application, and Discussion is divided into five sections. The first section describes how data were analyzed, and the following four sections present the four categories of suggestions provided by interviewees for strengthening A.R.A.S.A. (i.e., vision and strategy, goal breadth, actions, and efficiency/effectiveness; See Chapter VI. Results, Table 4). Each of these latter four sections is divided into three subsections: the first corresponds to the author's understanding of interview data (empathetic perspective), the second to the application of theory to the data, and the third to discussion and critique (distanciation).

Two sources of "suggestions" for strengthening A.R.A.S.A. are present: those derived from the interviewees' direct suggestions, and those derived from the author's theoretical analysis and critique of the interviewees' suggestions. To ensure that the reader understands the source of ideas, the word "suggestion" will be used to refer to interviewees' ideas for strengthening A.R.A.S.A., while the word "recommendation" will be used to signify either theoretical ideas or the author's analysis and critique.

Vision and Strategy

Understanding of Interview Data

One of the recurring themes offered by interviewees as being crucial to A.R.A.S.A.'s success involved the group's vision and strategy. Interviewees couched the concept of a vision and strategy in several similar but subtly different terms. These included: "misión" (mission), "visión" (vision), "vocación" (vocation), "metas" (goals), "objetivos" (objectives), and "plan estratégico" (strategic plan).

The author understands that when speaking of a "misión", "visión", or "vocación", the interviewee is speaking of a relatively abstract conception of what A.R.A.S.A. stands for and means to the community of Cananea, the wider ecosystem, and the world as a whole. It is within this greater mission, vision, or vocation that "metas" (goals) are defined. Depending on the interviewee, "metas" were identified as being very broad or very narrow, concrete or abstract, and some interviewees responded that they were not sure what the group's goals were at all.

Two interviewees used the terms "metas" and "objetivos" interchangeably. One compared A.R.A.S.A.'s need for well-defined goals and objectives to the need for scientific studies and plans before installing a new airport runway. Such plans not only establish the plane's exact direction for take-off and landing; they are needed to avoid extreme crosswinds and crashes. The meaning of this response was that if A.R.A.S.A. does not have a clear idea of where they are headed and what problems they would like to address, and if they have not made the necessary studies of the contextual basis and implications of problems, they will surely crash as they try to "take off" and address those problems.

Other interviewees used the term "objetivos" to imply small and specific actions taken within a "plan estratégico" (strategic plan) for reaching greater goals. Strategic plans were envisioned as being very ordered and specific, with indicators for success and clear points of arrival. One interviewee claimed that without indicators in place, "nunca sabes cuando

ganaste” (you never know when you’ve won). Several interviewees stressed the need for both long-term and short-term strategic plans of action.

One of the interviewees recognized the need for a strategic plan of action and a long-term vision but did not seem concerned that A.R.A.S.A.’s goals and vision were so general. This person described A.R.A.S.A. as a group of citizens that had organized around feelings of “preocupación” (preoccupation) or “por inquietudes” (because of worries or anxieties), as opposed to an organization unified around a specific academic topic or complaint. The interviewee claimed that groups that come together in this way often begin with goals that are quite general and vague, and that seem to be more of a declaration than a set of specific tasks. In this person’s view, A.R.A.S.A. just needs a bit more time to find its own identity and “vocación”, and that this would come on its own. The interviewee stated that although the group needs to enter into a process of strategic planning to determine its mission, vision, and from there its short-term objectives and goals, “a penas va a empezar en ese proceso” ([A.R.A.S.A.] is just going to begin in this process).

Theoretical Application

The theory investigated supports interviewee suggestions for strengthening the group through the definition of a clear, long-term vision or mission that conveys what the organization stands for, and what they would like to see change in the future. Shorter-term tasks can be defined and addressed under this vision or mission (Kahn, 1982). Grassroots organizations are also encouraged to define what “victory” means to them early on. Groups should delineate a strategy with specific, short-term tasks that can be pursued and viewed as smaller “victories,” or steps in the group’s progression (Kahn, 1982; Bettencourt et al., 1996). Groups are also recommended to create relatively formal structures that can help to guide them in the process of meeting goals, like both short- and long-term planning meetings (Bettencourt et al., 1996). These recommendations are consistent with A.R.A.S.A. participant suggestions for a strategic plan with short-term tasks and indicators for success. Such a process should ensure that motivation remains high throughout the endeavor, as group members get positive feedback from accomplishing the smaller tasks (Kahn, 1982).

Another related theoretical recommendation is to analyze the problem you would like to address before attempting to find a solution to that problem (Shaw, 1981). This is consistent with the suggestion given by the interviewee who related the need for a thorough understanding of problems to the need for extensive studies and plans when installing an airport runway. Shaw (1981) claims, “(i)f a group begins attempted solution with incomplete or faulty evidence concerning problem requirements, it may take an initial direction that prevents adequate solution” (p. 392). Analysis of the problem prior to taking decisions regarding its solution should also increase the chances for creative and innovative solution ideas (Shaw, 1981).

Discussion

The first recommendation drawn from interpretation of the responses described above is that A.R.A.S.A. participants should develop a unified understanding of what vision- and strategy-related terms mean, and clearly define the relationship between these meanings. Based on the context of responses, the author has inferred the meanings and relationships as presented in Figure 2 “Inferred relationship between vision, goals, and strategic plan.”

Figure 2: Inferred relationship between vision, goals, and strategic plan

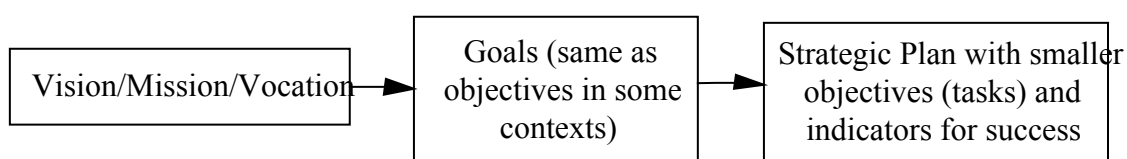


Figure text: As mentioned above, the author infers based on context that the terms, *visión*, *misión*, and *vocación* are used by different participants to describe much the same thing, i.e., a fundamental and relatively abstract concept of who A.R.A.S.A. is and how they would like to see the region change. Arrows indicate that this vision/mission/vocation should inform the group’s principal goals, and that the goals of the group dictate how the strategic plan for action should be delineated. As previously discussed, some interviewees equated goals with objectives, however others saw objectives as being more in line with smaller tasks presented under the strategic plan.

In addition to establishing the meaning and relationship between terms, in keeping with interviewee suggestions, there is a need to discuss and agree on the content of the terms and their implications for the group. Although many interviewees cited a need for a long-term vision or mission, other interviewees recognized the existence of a documented “mission statement,” contained in the government-approved documentation establishing A.R.A.S.A. as a legal civic association in the state of Sonora, Mexico (See Chapter III. Background, Table 1 “A.R.A.S.A.’s documented mission”). This documented mission statement could serve as the starting point for discussion and consensus on A.R.A.S.A.’s broader vision/mission/vocation.

Goal Breadth

Understanding of Interview Data

Many interviewees commented on the current breadth of A.R.A.S.A.’s documented goals, as defined in the group’s government-approved documentation (See Chapter III. Background, Table 2 “A.R.A.S.A.’s documented goals”). Those interviewees that criticized A.R.A.S.A.’s goals as being too broad cited several reasons for their discontent. Wide goal breadth made them uncertain of A.R.A.S.A.’s direction or specific purpose, and some found this lack of direction frustrating. One interviewee offered the thought: “que mucho abarca, poco aprieta” (he who grabs much applies little pressure), implying that the broader A.R.A.S.A.’s goals were, the less was their ability to get anything done because focus was distracted by competing aims.

Several other interviewees also expressed concern that a broad goal base decreased A.R.A.S.A.’s ability to address its stated goals (in other words, its “productivity” or “effectiveness”). One interviewee offered the insight that one of the most important factors in the success of young grassroots organizations is matching available resources to the resource needs for stated goals. In this interviewee’s opinion, A.R.A.S.A.’s goals were so broad that the group probably did not have sufficient resources to address them all.

The final critique of a broad goal base related to A.R.A.S.A.’s organizational properties (e.g., its target membership, political role, meeting times, and meeting location). One interviewee claimed that organizational properties should be chosen to support the principal goal of the organization. According to this person, such organizational properties could be mutually exclusive for different goals.

There were, however, a few interviewees who commented on the benefits enjoyed precisely due to A.R.A.S.A.'s goal breadth. Two interviewees gave concrete reasons for maintaining A.R.A.S.A.'s broad mandate. The first said that if the goals are quite broad, A.R.A.S.A. will enjoy a larger support base within the community because more members of the community will identify with the cause. This increased interest and potential involvement of community members in A.R.A.S.A.'s work should benefit the group. Another interviewee claimed that a broad set of goals allows members to become active in their personal areas of expertise, and diversifies professional connections. Both of these aspects should help A.R.A.S.A.'s ability to achieve its goals (i.e., its "productivity" or "effectiveness").

Theoretical Application

The theory reviewed offered insight consistent with interviewee concerns that a broad goal base can be detrimental, even destructive, to groups that lack the resources to address their goals (Kahn, 1982). At the same time, it is important for organizations to address the specific needs of its members. This has the effect of increasing the number of issues that groups would like to tackle (ibid). Theory also supports interviewee claims that a wider goal base can increase community interest and membership in the organization (ibid). The final recommendation is however, that "(o)rganizations, again like people, tend to be judged by what they do, not by what they say about themselves..." and that, "there are real limits to what any organization can do" (ibid, p. 103, 104). To optimize the chances of having the appropriate goal breadth, organizations are recommended to compare the resources available to the resource demands that each separate goal requires. This recommendation is consistent with one of the interviewee suggestions cited above.

The theory additionally stresses the importance of understanding the group's principal goals: "Most significantly, perhaps, is the fact that goals held for the group may be heterogeneous; not every group member perceives the goals of the group in the same way... a group member may improve effectiveness by working toward goal clarification and unification" (Shaw, 1981, p. 440). To overcome contradictions in goals and direction, Barragán (1999) recommends that recognition and respect be given to the ethical basis, origin, and vocation of the group, particularly with respect to the convictions of group founders. The founders are responsible for having brought diverse viewpoints together in the first place. At the same time, groups are recommended to keep their "nucleus of orientation" (or principal focus) flexible, directing it towards unification of diverse interests (Barragán, 1999, p. 568). Kahn (1982) argues that it is natural for the central priorities of organizations to change at times. He encourages groups to allow this to happen, provided that both the positive and negative implications of such change are thoroughly considered (Kahn, 1982).

Discussion

The author's understanding of the relationship between goal breadth and effectiveness as described by the interviewees is depicted in Figure 3 "Inferred relationship between goal breadth and effectiveness."

Figure 3. Inferred relationship between goal breadth and effectiveness

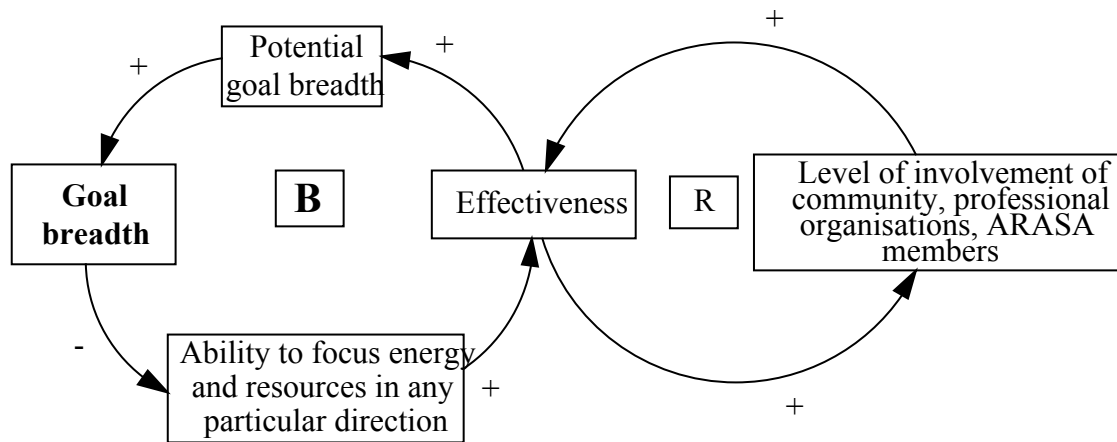


Figure text: Increased goal breadth leads a decreased ability to focus energy and resources in any particular direction. This should lessen A.R.A.S.A.'s ability to address its many competing goals (i.e., its "effectiveness"). If A.R.A.S.A. is not effective, the community, professional organizations, and A.R.A.S.A. members themselves will be less inclined to be involved in the group, further decreasing effectiveness (this reinforcing loop is denoted by the letter "R"). However, low effectiveness should decrease the group's potential goal breadth, and therefore lessen goal breadth, increasing ability to focus energy and resources and finally, effectiveness (this loop is balancing and is denoted by the letter "B").

The major point of Figure 3 is that an expansive goal breadth may decrease group effectiveness because energy and resources are diffused and not focused. However, if low effectiveness causes the group to rethink potential goal breadth, and thus contract the number of goals pursued, effectiveness should increase (loop "B"). Suitable goal breadth could be determined by evaluating group effectiveness in progression toward its goals. If effectiveness is low, goal breadth should contract. However if effectiveness is high, goal breadth could expand into other areas.

The second loop (loop "R") attempts to include interviewee suggestions that increased involvement by the community, professional organizations, and A.R.A.S.A. members should enhance effectiveness. The author's point in this case is that these people will not want to become involved in the first place if the group is not effective, and that effectiveness is more directly tied to appropriate goal breadth than it is to such involvement (emphasis on the balancing loop is demonstrated by placing "B" in bold).

To understand more precisely how interviewees perceived A.R.A.S.A.'s essential goals, the author asked, "What are A.R.A.S.A.'s most important goals, in your opinion?" Of those interviewed, the most frequent response related to environmental education, although several thought that other goals were more important. These included, in order of the frequency of the response, preservation/restoration of the ecological richness of the region, group consolidation, and information gathering and dissemination (See Chapter VI. Results, Table 5 "Interviewee perceptions of A.R.A.S.A.'s most important goals"). These responses could be helpful to begin the discussion on group focus if A.R.A.S.A. indeed decides to narrow the breadth of its goals.

Actions

Understanding of Interview Data

In addition to interviewee suggestions for strengthening A.R.A.S.A. that dealt with the group's vision, strategic plan, and goals, A.R.A.S.A. interviewees offered thoughts for strengthening the organization within the categories of action and efficiency/effectiveness.¹³

Some of the most important factors in the "action" category delineate the type of actions that are appropriate to achieving A.R.A.S.A.'s goals. Actions must be relevant to community needs, they should not be controversial, the processes surrounding actions must be transparent, and they must be achievable (See Chapter VI. Results, Table 4 "Interviewee suggestions for strengthening A.R.A.S.A. and increasing its impact in the community" for a full presentation of ideas). These four qualifications to the "action" theme are discussed in turn.

One interviewee stressed the point regarding the relevance of A.R.A.S.A.'s actions to community needs. This person claimed that A.R.A.S.A. must understand as much as possible about the region's problems in order to be able to "enter in" to an effective working relationship with people in the community: "tiene que, como la humedad, meterte" (you have to, like the humidity, enter in). The interviewee said that members must develop personal social relations through active involvement with people in the community. Only then could the community be expected to identify with A.R.A.S.A.'s interests, and only then would A.R.A.S.A. know which problems really mattered to people. This person championed the effectiveness of patient, door-to-door house calls and the sharing of meals for building such relationships.

This building of trust would be a dual process. By developing close personal ties with people in the community, A.R.A.S.A. members would then more fully understand which environmental issues are most relevant, and conversely, most controversial. This interviewee and many others expressed extreme caution and even disapproval of A.R.A.S.A. concentrating on sensitive or controversial topics early on in its existence. One interviewee suggested that A.R.A.S.A. should not enter into projects that were too difficult, unclear, or that A.R.A.S.A. was not well prepared for. This person compared the necessity of A.R.A.S.A.'s selective maneuvering among potentially controversial and damaging topics to the movements of a bull fighter who must have an intimate knowledge of how to engage the dangerous bull with his right hand, and his left, and finally with the scarf as well. Some interviewees expressed the view that A.R.A.S.A. could learn more about the most pressing problems of the region through monitoring and research of environmental health data (i.e., contamination levels in air, water, and soils). One interviewee mentioned that A.R.A.S.A. should not focus on telling people which problems were relevant to the region, but instead should work to convince them.

Another qualification for A.R.A.S.A.'s actions is that they be achievable. Many interviewees expressed concern that A.R.A.S.A. places undue emphasis on large and unwieldy tasks not matched to its current capacity, or on tasks that cannot be solved in the short term. Although

¹³ Several suggestions within this category were straightforward aspects relating to actions that A.R.A.S.A. might engage in. These suggestions are kept out of the analysis and can be found in Chapter VI. Results, Table 4 "Interviewee suggestions for strengthening A.R.A.S.A. and increasing its impact in the community." Ideas included in the analysis relate directly to the theoretical recommendations and/or the author's critique.

interviewees generally support A.R.A.S.A.'s interest in large tasks, many thought it crucial at this early stage to get involved with smaller jobs that can be finished relatively quickly. These accomplishments could serve as a kind of active propaganda promoting A.R.A.S.A.'s visibility and the community's subsequent knowledge of and trust in the group. Another interviewee recognized the importance of traditional forms of propaganda, but only as a distant second to the dissemination of A.R.A.S.A.'s name through concrete actions. This individual claimed that most people in the community did not even know of A.R.A.S.A.'s existence. Another interviewee concurred with this viewpoint stating that A.R.A.S.A.'s relationship to the community should be one where "you know them by their work." A final interviewee said that A.R.A.S.A. would be most strengthened by achieving a noticeable difference in the quality of the region's environment (through actions). This interviewee offered that A.R.A.S.A. should be known as a sort of "club de servicio" (service club), that gives clean air, clean soils, and clean water to the community instead of material or health-related gifts (glasses, wheelchairs, etc.) like most service clubs do.

As community members gain knowledge of and trust in A.R.A.S.A. through its actions, they may wish to become directly involved in the organization. Many interviewees suggested that A.R.A.S.A. should pro-actively reach out to community members and encourage them to participate in all kinds of A.R.A.S.A.-sponsored projects and campaigns. Some expressed the view that such involvement could serve to solidify bonds and reinforce feelings of trust. One interviewee argued that a commitment to transparency in actions is the most vital factor for building community trust and confidence.

Two interviewees said that community trust is particularly important to organizations in a small town like Cananea (population approx. 35,000). One interviewee cautioned, "Pueblo chico, mitote grande" (Small town, big gossip). This person was referring to the potentially extremely damaging effect of community misperceptions and mistrust about A.R.A.S.A.'s intentions. Another interviewee spoke extensively about this danger, claiming that some groups in the region have already developed an ill will towards A.R.A.S.A. because of its prior involvement in controversial areas, among other things. Community trust in this sense could serve to augment community support for A.R.A.S.A. in the face of potential misrepresentation or slandering. Community support in this case implies that community members will stand behind A.R.A.S.A.'s cause and not perpetuate misrepresentations of the group and its intent. A couple of interviewees mentioned that such community support could perhaps eventually allow A.R.A.S.A. to enter into more sensitive or controversial issue areas later on.

Theoretical Application

Theory supports A.R.A.S.A. interviewee suggestions as presented above in every major aspect. Kahn (1982) claims that grassroots groups should concentrate their energies on issues that are strongly felt and affect a lot of people (i.e., that are relevant to people). Groups are encouraged to spend time really listening to community members to find out which issues they care most about, and then to involve community members in finding solutions to those issues (ibid). Alternatively, groups can work to convince people of the relevance of goals already established, promoting a critical awareness about issues (Bettencourt, 1996). Inclusion of diverse social actors can build civic organizations through the rich and complex associations thus formed, challenging socially constructed separations (i.e., between rural and urban people, intellectual and manual workers, men and women, etc.) (Barragán, 1999).

These theoretical points coincide with interviewee suggestions to understand relevant problems and focus on community inclusion in group activities.

A second recommendation is for grassroots groups to focus on issues that unify members and the community (Kahn, 1982). Kahn (1982) argues that grassroots groups should avoid divisive issues because they can destroy the organization. This recommendation is in keeping with interviewee suggestions regarding pursuit of non-controversial actions. Barragán (1999) further advocates transparency both internally and with community relations, particularly in places with histories of authoritarianism and corruption (like Mexico).

The final theoretical point relates to interviewee suggestions about achievable actions. Kahn (1982) similarly argues that good issues are “winnable” for the organization (p. 95). Newer groups are encouraged to address easier issues first because early successful efforts build skills and self-confidence, increasing the capacity of the organization and therefore its ability to tackle larger problems later (ibid).

Discussion

The topic pertaining to actions that was frequently discussed, and yet which seems vague to the author is an understanding of A.R.A.S.A.’s relationship to the community and how this relationship could strengthen the group. As discussed in the text, many interviewees felt strongly that community knowledge of A.R.A.S.A.’s work, community involvement in A.R.A.S.A.’s work, and community trust in A.R.A.S.A.’s purpose are central concerns and factors that would enhance the organization’s strength.

One theme that seemed crucial to many interviewees for building trust in the community was the avoidance of controversial issues. One of the questions the author asked interviewees sheds light on this topic. The question was, “What are the greatest obstacles that A.R.A.S.A. faces or has already faced?” In response to this question, many interviewees spoke about the sensitive and highly divisive nature of certain issues to community members in Cananea (See Chapter VI. Results, Table 6 “Interviewee perceptions of A.R.A.S.A.’s most significant obstacles” for a full presentation of ideas). The controversy that A.R.A.S.A. interviewees were most concerned about related to the expansion of federally protected nature reserves in northern Sonora. Many community members are strongly against the expansion of such reserves. However A.R.A.S.A. took a position in favor of reserve expansion early on in its existence. Several interviewees were frightened that if A.R.A.S.A. became active in promoting reserves again, they would alienate a lot of people in the community and perpetuate mistrust in the group’s intentions.

The issue of the reserves relates directly to mistrust. The expansion of Mexican nature reserves was envisioned to join and create a biological corridor with similarly protected lands on the United States side of the border. In addition, A.R.A.S.A. strongly promotes binational cooperation for ameliorating transboundary environmental problems, and has alliances with U.S.-based groups and government agencies. Therefore some interviewees thought community members see A.R.A.S.A. as a front for U.S.-interests exerting control over Mexican lands, in a form of neo-colonialism. The historical context of Cananea, Mexico sheds light on the relevance of these fears: the city and surrounding lands remained under the U.S. ownership until 1959, within the lifetime and memory of many people in the community (See Chapter III. Background).

At the same time that interviewees thought community trust was crucial to the strengthening of the organization, and should be actively promoted, there existed a deep *mistrust* demonstrated by A.R.A.S.A. members themselves towards certain powerful interests in the community (e.g., industry). Some interviewees thought, for example, that A.R.A.S.A. should be cautious in allowing membership to people that might enter the group with the sole purpose of trying to destroy it (See Chapter VI. Results, Table 7 “Interviewee perceptions of A.R.A.S.A.’s membership” for a full presentation of ideas). Metaphors used to describe this situation included: instances where people would enter A.R.A.S.A. as “caballos de Troya” (Trojan horses), or where they might enter to lay “trampas” (traps), causing the group to falter and fall apart. One interviewee thought that A.R.A.S.A. is still highly susceptible to such influences, and should keep relatively small and closed until the group has consolidated and gained enough strength to allow potentially dissenting voices to join.

Most interviewees were keenly aware of the problem caused by the complex dynamic of trust and mistrust extant between A.R.A.S.A. and some community interests. This is because if A.R.A.S.A.’s fear of powerful groups results in exclusivity in membership, this exclusivity could compromise community trust in the group. Some interviewees said that exclusivity in organization and management is often associated with authoritarianism in Mexican culture, and that this was an association that A.R.A.S.A. would do best to avoid.

Figure 4 “Inferred relationship between an open membership policy and A.R.A.S.A.’s strength” presents a visual representation of this difficult situation.

Figure 4: Inferred relationship between an open membership policy and A.R.A.S.A.’s strength

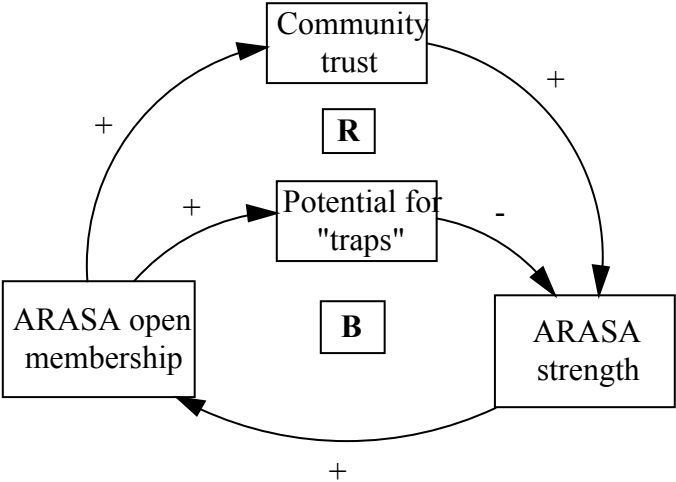


Figure text: As A.R.A.S.A. opens its membership to all interested community members, the level of community trust increases. Increased community trust should have a positive effect on A.R.A.S.A.’s strength, as suggested by interviewees. The stronger A.R.A.S.A. becomes, the more open its membership can be because there will be less fear that the group could easily fall apart. This creates a reinforcing loop denoted by the letter “R.” An open membership policy should also increase A.R.A.S.A.’s vulnerability to “traps” (i.e., sabotage by people with conflicting interests). The danger of individuals entering A.R.A.S.A. to lay traps would decrease the strength of the group, and serve to discourage an open membership policy. The balancing effect caused by this loop is indicated by the letter “B.”

A recommendation for A.R.A.S.A. is to consider the relative importance of the links between open membership, community trust, and A.R.A.S.A. strength; versus open membership, potential for “traps,” and A.R.A.S.A. strength. Which of the links has a greater effect on

A.R.A.S.A. strength and therefore drives the system? If participants think that the community trust fostered by open membership strengthens A.R.A.S.A. more than a subsequent danger of sabotage weakens it, then open membership should be pursued. If the reverse is true, perhaps membership should be kept relatively closed until A.R.A.S.A. is strong enough to handle divisive interests.

A further thought not mentioned by interviewees: if A.R.A.S.A. gains a reputation early on as being exclusive, this aspect of its identity may perpetuate in people's minds and continue to affect community trust, even if A.R.A.S.A. opens its membership later on.

Efficiency/Effectiveness

The final category of interviewee suggestions for strengthening A.R.A.S.A. relate directly to the organization's efficiency and effectiveness (See the Glossary for a definition of terms).¹⁴ These concepts are grouped together because suggestions offered by interviewees most often affect efficiency and effectiveness concurrently. The theory recommendations, however, mostly pertain to effectiveness alone.

Understanding of Interview Data

Many interviewees felt that A.R.A.S.A. efficiency and effectiveness are not currently being optimized because responsibility is not adequately distributed among members. One interviewee claimed that "A.R.A.S.A. no es una cabeza" (A.R.A.S.A. is not a head), referring to the opinion that A.R.A.S.A. is instead a body, made up of organs with specific roles and functions that should work together as a team. A few people were particularly impressed by the amount of time and energy that select members dedicated to the group. However these interviewees believed that A.R.A.S.A. would work better if those members learned to delegate responsibility and encouraged other people to take on some of the burden. There was a widespread feeling that people who over-committed would eventually burn out, and that this was a common reason for the dissolution of new volunteer organizations.

Many offered the suggestion that instead of working to address problems as a large unit, A.R.A.S.A. could break into smaller working groups that address tasks within their particular area of expertise. One person stated that A.R.A.S.A. was wasting a rich resource by not taking advantage of the particular knowledge and experience of members. The interviewee said that A.R.A.S.A. should make a list of all the special interests of members and keep members informed about A.R.A.S.A.'s and other groups' activities that are relevant to those interests: "[A.R.A.S.A.] es como un crisol que está quitando voluntades, intereses, y proyectos, de varias gentes" ([A.R.A.S.A.] is like a melting pot that is taking willingness, interests, and projects from different people). This should help increase the capacity and knowledge of members, because they can learn from each other's areas of expertise. The interviewee further claimed that once specialties and specific roles were established for group members, those members should be strongly encouraged to stick to those roles. This person cited the inefficiency of misusing peoples' talents in inappropriate roles, giving an example of the way

¹⁴ Several suggestions within this category were straightforward aspects relating to administrative methods (i.e., meeting length, notification) and resource procurement (i.e., funding, infrastructure). These suggestions are kept out of the analysis and can be found in Chapter VI. Results, Table 4 "Interviewee suggestions for strengthening A.R.A.S.A. and increasing its impact in the community." Ideas included in the analysis relate directly to the theoretical recommendations and/or the author's critique.

Cananea tax money was wasted when the city mayor spent time sweeping city streets (as a symbolic act).

Many interviewees agreed that by breaking into smaller working groups, A.R.A.S.A. would actively include more members and augment the organization's effectiveness. This should concurrently decrease the potential for over-commitment and burnout of any subset of people. A couple of interviewees believed that making meetings and projects fun and valuable to members should increase their personal sense of satisfaction and strengthen social ties, thereby increasing member dedication to the group. Finally, one interviewee claimed that maintaining a strong and dedicated work ethic in its members was the single most important factor for strengthening A.R.A.S.A.—in this case, strengthening the group was equated with increasing A.R.A.S.A.'s ability to effectively carry out actions.

Theoretical Application

The theory investigated recognizes several factors as being crucial to achieving optimal productivity, or effectiveness, in groups. In small group theory, faulty coordination and loss of motivation are recognized as being significant contributors to productivity decline (Steiner, 1972). Within social psychology, Bettencourt et al. (1996) investigate methods grassroots groups can use to enhance the coordination and motivation of members, but take Steiner's (1972) ideas one step further by positing that group identity is a third key element affecting productivity.

Interviewee suggestions for strengthening A.R.A.S.A. in the efficiency/effectiveness category are analyzed here with these three factors (coordination, motivation, and group identity) in mind. Figure 5 shows, "Inferred relationship between themes in the efficiency/effectiveness category."

Figure 5: Inferred relationship between themes in the efficiency/effectiveness category

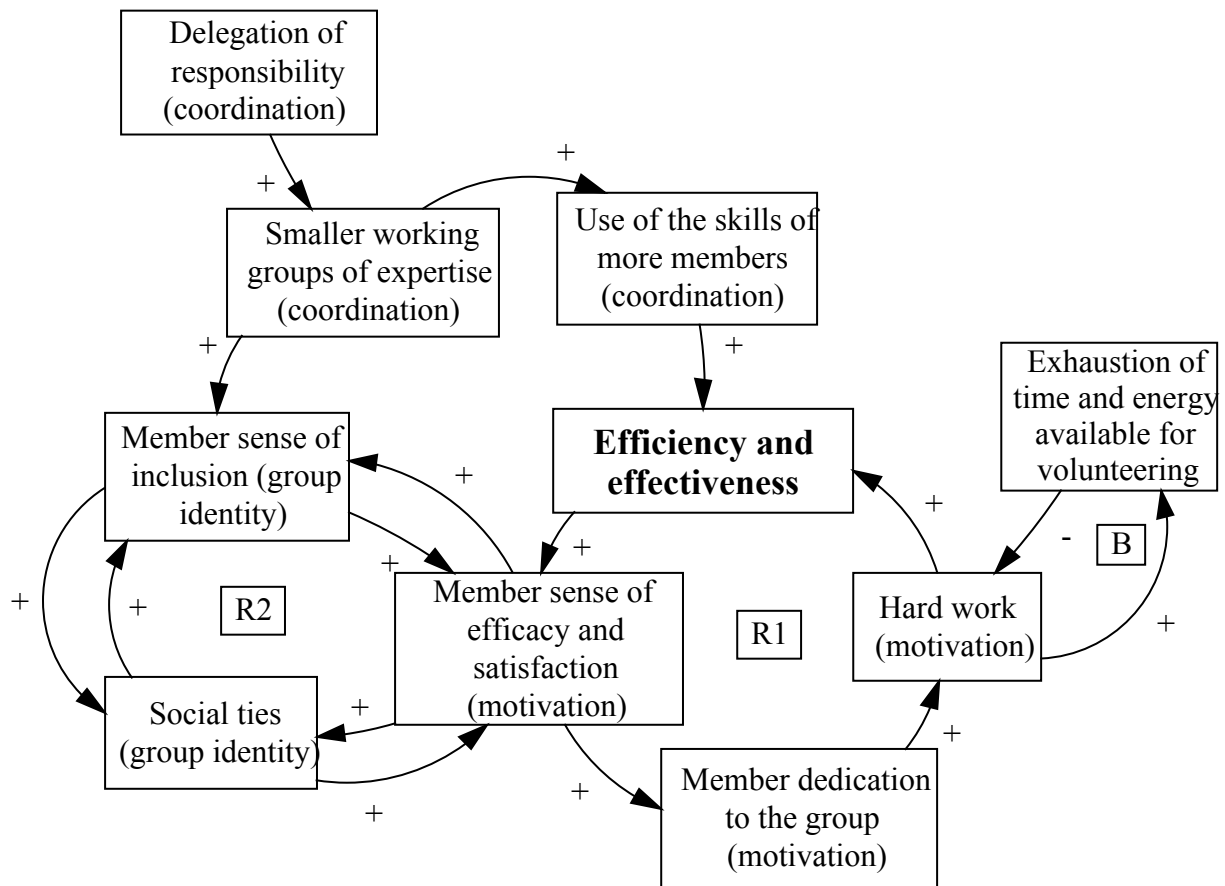


Figure text: Ideas mentioned by interviewees are shown including the inferred relationship between them. Theoretical concepts are placed in parentheses under the interviewee ideas with which they correspond. Delegation of responsibility by members in positions of power should increase the number of small working groups of expertise in A.R.A.S.A., which should increase the utilization of the skills of different members and positively affect both efficiency and effectiveness. Efficiency increases in this case because members that work within their own areas of expertise are using well-established skill sets, and will be able to accomplish more with less time, energy, and/or money, than members that might not have expertise in those fields. Effectiveness is enhanced because more people will be actively working for A.R.A.S.A., and not just a few. The increase in efficiency and effectiveness has a positive effect on members' sense of efficacy and satisfaction resulting from their involvement with A.R.A.S.A., and should therefore increase member dedication to the group. Members that are more dedicated should work harder, which will also increase efficiency and effectiveness.¹⁵ "R1" depicts this reinforcing loop. Smaller working groups of expertise should also increase members' sense of inclusion in A.R.A.S.A., which should enhance social ties and positively affect members' sense of efficacy and satisfaction, which in turn increases their sense of inclusion in a reinforcing manner. This second reinforcing loop is depicted by "R2," and also runs in the opposite direction (i.e. member sense of inclusion directly increases feelings of efficacy and satisfaction, which enhances social ties and the same sense of inclusion). The system is balanced by the limited time and energy that any individual will have for volunteer work. The harder individuals work, the more they will exhaust their available time and energy, decreasing their ability to work hard for A.R.A.S.A. (balancing loop denoted by the letter "B").

¹⁵ The concept of "burn-out," as expressed by interviewees and understood by the author, is found implicitly in Figure 5 as being a state of extremely low participant dedication to the group as a result of the inefficiency and ineffectiveness of some participants taking on too much responsibility.

Theory once again strongly supports interviewee suggestions for strengthening A.R.A.S.A., as described in the previous section and depicted in Figure 5.

Delegation of responsibility, the formation of smaller working groups, and the use of member skills are aspects related to group structure and group coordination (Bettencourt et al., 1996). Group structure is represented by forms of decision-making, leadership, planning, alliances, roles, statuses, norms, power differentials, and communication patterns; and is an essential component in coordination (Bettencourt et al., 1996; Shaw, 1981). The delegation of responsibility or sharing of responsibility, especially in leadership, decision-making and planning, is a coordination aspect stressed by all sources investigated.

Shared leadership, decision-making, and planning enhance the sense of ownership members have regarding group decisions and plans, increasing their dedication to implementation of measures and therefore group effectiveness (Shaw, 1981; Kahn, 1982). Individual skills and capacities are also developed in this fashion, further building the organization (Kahn, 1982; Barragán, 1999). Actively encouraging participation in decision-making and group function also allows for the voicing of minority opinions, which may otherwise not be heard (Shaw, 1981; Bettencourt, 1996; Barragán, 1999). Such diversity in perspectives on issues should enhance group effectiveness because it promotes adequate consideration of all relevant aspects to a problem (Shaw, 1981; Bettencourt et al., 1996). These theoretical interpretations support the “coordination” ideas offered by interviewees and presented in Figure 5.

To encourage further participation and diverse viewpoints, organizations could elect members to positions of importance and occasionally rotate these positions (Barragán, 1999). Other recommendations for improving the coordination in grassroots groups include: allowing for a centralized but inclusive and participatory-style leadership to help manage the activities of working groups, and promoting the development of effective communication skills among members (Bettencourt et al., 1996).

Motivation is a second aspect essential to group effectiveness stressed in the theory. A “motive” is defined by Zander (1990) as “an individual’s disposition to strive for a certain kind of satisfaction. It is an enduring disposition that a person carries with him or her from setting to setting” (p. 5). Member sense of efficacy and satisfaction, as depicted in Figure 5, is therefore an element affecting motivation. The dedication and hard work that result from that satisfaction, also depicted in Figure 5, are thus related to motivation as well. Theory supports interviewee perceptions that developing and utilizing the skills of members should increase group effectiveness, the sense of efficacy in individuals, and finally, the motivation to stay involved (Bettencourt, 1996). Members should be encouraged to consider their own time and energy limitations and not to over commit, so as to avoid burnout (Bettencourt, 1996).

Other aspects identified by the theory as being important to motivation in grassroots groups include: placing emphasis on the successes of the group and on the successes of similar groups (Bettencourt, 1996; Bettencourt et al., 1996), planning certain strategies with the purpose of strengthening morale (especially during times of limited success), reiterating the overarching mission of the group, and focusing on the fact that group members will surely differ in what motivates them (and that this can change). Effective groups try to ensure that individual members’ needs are met (Bettencourt, 1996).

The final category that relates to group effectiveness is group identity. Bettencourt et al. (1996) describe group identity as being the condition in which members associate themselves

with the group to the extent that they consider their membership to form part of their individual identity. This source postulates that strong group identity among members should enhance both motivation and coordination elements in group function, and thus, effectiveness.

A particularly relevant aspect to group identity as identified by Bettencourt et al. (1996) is group cohesiveness. Group cohesiveness is defined as being “the degree to which group members are attracted to each other and to the group” (Shaw, 1981, p. 395). Group cohesiveness can be broken into two related conditions: personal attraction and social attraction (Hogg, 1996). Personal attraction relates to interpersonal relationships (i.e., friendships) established between members, while social attraction is associated with the sense of “belonging” that members feel when they identify themselves with their group (differentiating themselves, the “ingroup,” from others, the “outgroup”) (Hogg, 1996). Promotion of both kinds of cohesion can help sustain grassroots efforts by encouraging member dedication to the group (Bettencourt, 1996; Bettencourt et al., 1996). Barragán (1999) claims that the “afecto” (affection) brought about through social ties is, “clave de organización” (the key to organization) (p. 551). These theoretical perspectives support interviewee understanding that members’ sense of inclusion (social attraction) and social ties (personal attraction) are important factors for their continued motivation to remain dedicated to the group. One recommendation for increasing group identity is to plan some projects that have as their principal objective the building of social ties and social support (Bettencourt et al., 1996).

Discussion

Although A.R.A.S.A. interviewee ideas regarding efficiency and effectiveness are supported by theory in many ways, one area that the group might try to concentrate on is establishment of a cohesive identity. Although the theoretical sources characterize group identity as being largely dependent on and defined by the forces of social and personal attraction between members, Barragán (1999) indicates that the formation of cultural identity is also a significant factor in maintaining organizations. The cultural identity of the group is established through “the unity of the group, its successes, new customs and aspirations” (Barragán, 1999, p. 558). Perhaps the “unity of the group” and thus its cultural identity could be enhanced through deeper reflection and consensus on the many “identity” aspects already mentioned in this chapter (i.e., vision and strategy, goal breadth and principal goals, membership and relation to the community). One final identity aspect that has not been touched upon yet, but which is particularly salient in Mexican civil society literature relates to A.R.A.S.A.’s political role.

A.R.A.S.A. interviewees expressed mixed feelings about the potential for group activity in the political arena (See Chapter VI. Results, Table 8 “Interviewee perceptions of A.R.A.S.A.’s political role”). Olvera (2002) claims that the political involvement of civic associations is vital for strengthening civil society because it provides a vehicle for citizens to participate in a more democratic form of governance than that which is currently offered by the State (See Glossary for definitions of civil society and governance). Citizen inclusion in governance via civic associations is a kind of “democratization of public life,” which is especially relevant to Mexico because of the country’s only recent transition to a democratic style of government (Olvera, 2002, p. 9). Because the degree to which A.R.A.S.A. would like to participate in political discourse and action is currently unclear, it may be a crucial area for future reflection in group attempts to reach consensus on identity.

VIII. CONCLUSIONS

A mirror for potential self-critique and evaluation

The A.R.A.S.A. participants interviewed gave suggestions for “strengthening” the group that were largely in line with theoretical recommendations for increasing the chances for survival and productivity in groups. This is not surprising, as the citizens in Cananea generally have a high level of education, and as A.R.A.S.A. is made up mostly of middle class urban professionals, who often have post-bachelor’s degrees and are involved in other environmental NGOs. Therefore, perhaps the most important way that A.R.A.S.A. can begin to strengthen itself is to look to the suggestions of participants as presented in Chapter VI. Results, Table 4, and further described in Chapter VII. Understanding, Application, and Discussion under the subsections: “Understanding of interview data.” These suggestions have value distinct from purely theoretical recommendations or the author’s critique because they reflect viewpoints steeped in local, contextual knowledge about the problem. One interviewee mentioned that groups and individuals often do not benefit much from researchers who come in as “outside experts” and try and tell them what to do or how to improve themselves. According to this interviewee, a better approach for the author was to present A.R.A.S.A. with a kind of “mirror” of themselves based on the interview data, so that they could begin self-critique, reflection, and evaluation on their own. Major categories of interview suggestions for “strengthening” included:

- the need for a concrete vision and strategic plan,
- the narrowing (or maintenance) of current goal breadth (i.e., suggestions were contradictory),
- accomplishing non-controversial actions in the community, and
- increasing organizational efficiency and effectiveness through methods discussed above and in Table 4.

Four recommendations based on the author’s analysis

In addition to this research effort’s potential value as a mirror, perhaps the author can offer some insight into the problem specifically because of her outsider's perspective. Four conclusions that build on interviewee suggestions for strengthening are presented below:

1. The first recommendation is that the group needs to clarify understanding of the definitions of and relationships between subtle words like “vision”, “mission”, “vocation”, “goals”, “objectives” and “strategic plan.” Some terms were used interchangeably, or in different ways by the various interviewees. The author hypothesized that “vision”, “mission”, and “vocation” represented the same relatively abstract concept, that “goals” were thought of as particular changes that group participants wanted to see in their region, and that “objectives” were smaller, more manageable tasks pursued in a “strategic plan” of action. The group would probably have an easier time defining what their vision, goals, and strategic plan are if they first reached consensus on what those terms mean. For example, it seems problematic that the group already has an official and documented “mission statement” (See Table 1), but at the same time that interviewees were often unclear on the group’s mission.
2. The second recommendation pertains to group goal breadth and principal goals. As interviewee suggestions were contradictory regarding appropriate goal breadth, and as not everyone agreed on A.R.A.S.A.’s most important goals, clarification of these aspects could be vital for group strengthening. One way that A.R.A.S.A could achieve

suitable goal breadth would be to analyze effectiveness in advancing towards stated goals: if effectiveness is high, then perhaps goal breadth can expand or at least be maintained, but if the reverse is true, contraction is warranted.

3. A third recommendation relates to developing consensus and common understanding about A.R.A.S.A.'s membership rules. Interviewees voiced extremely disparate opinions about what kind of people should be allowed to enter as voting members, with suggestions ranging from a completely open policy encouraging anyone and everyone to join, to remaining small and relatively exclusive until the group became more consolidated in its core. The disagreement pertains to a conflict between nurturing trust and knowledge in the community about A.R.A.S.A.'s activities and intentions (those adhering to an open door policy) and fear of dissent and sabotage (those favoring exclusivity). Reflection and dialogue about this issue could help A.R.A.S.A. develop a level of inclusivity/exclusivity appropriate to its context and purpose, which could lead to a consistent plan regarding potential membership. Additionally, it is clearly a problem that some interviewees are currently unaware of their status as either official "members" or "non-members" of the group. A.R.A.S.A. should make sure that participants are aware of their official status.
4. The fourth and final recommendation relates to all previous recommendations and pertains to A.R.A.S.A.'s need for a more specific, unified identity (i.e., consensus on vision and strategic plan, goals, membership). One identity aspect that did not arise in other recommendations is A.R.A.S.A.'s potential political role, which interviewees did not agree on and ought to clarify. Unified identity in all these aspects should promote individuals' sense of place and belonging in the group, and therefore their motivation and A.R.A.S.A.'s subsequent effectiveness.

Suggestions for future research

A.R.A.S.A.'s identity as an environmental grassroots group with a Mexico-U.S. binational mandate makes many potential studies possible. Research could be specific like the present study (i.e., pertaining to A.R.A.S.A. alone and not attempting to make wider extrapolations), or more general (i.e., relating to Mexican environmental grassroots groups). Areas for more specific research include:

- A.R.A.S.A.'s role in fostering cooperation and dialogue between Mexico and the United States regarding environmental issues that are particularly salient to the border region (e.g., water extraction, allocation and contamination; biological corridors; air pollution; hazardous waste from maquiladoras);
- A.R.A.S.A.'s relationship to the community. Especially important is their perception of who the community is, how the community is influenced, to what extent people in the community know about A.R.A.S.A., how people in the community perceive A.R.A.S.A., and whether there are ways to enter into open and honest dialogue with groups whose interests conflict with A.R.A.S.A.'s goals (i.e., mining and industry groups, people joined against federally-protected nature reserves);
- Development and execution of a formal evaluation of A.R.A.S.A.'s progress and direction.

General studies could examine the role of Mexican and U.S. environmental grassroots organizations in bridging the cultural divide between the two countries, through increasing cooperation regarding trans-boundary environmental problems. The most helpful studies for this author's research question would have been comparative investigations of the obstacles and successes of Mexican environmental grassroots groups in general, though no such sources

were located. Torres (1998) claims that comparative studies of the experiences of Mexican and Central American civil society organizations are practically non-existent; this, then, could be an extremely relevant future direction for research.

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